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Powering Business Worldwide

IZM6 Series Air Circuit Breakers



IZM6 Series Air Circuit Breakers

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IZM6 Series Air Circuit Breakers

Product description

The IZM6 series circuit breakers are a new generation of high-performance air circuit breakers with sophisticated technology and comprehensive functions, offering safety and reliability.

The circuit breakers are suitable for use in electrical distribution networks with AC 50Hz/60Hz, rated operating voltage up to 1140V, and rated operating current of 6300A and below, to provide functions such as measurement, diagnosis, analysis and communication, precise selective protection and power monitoring.

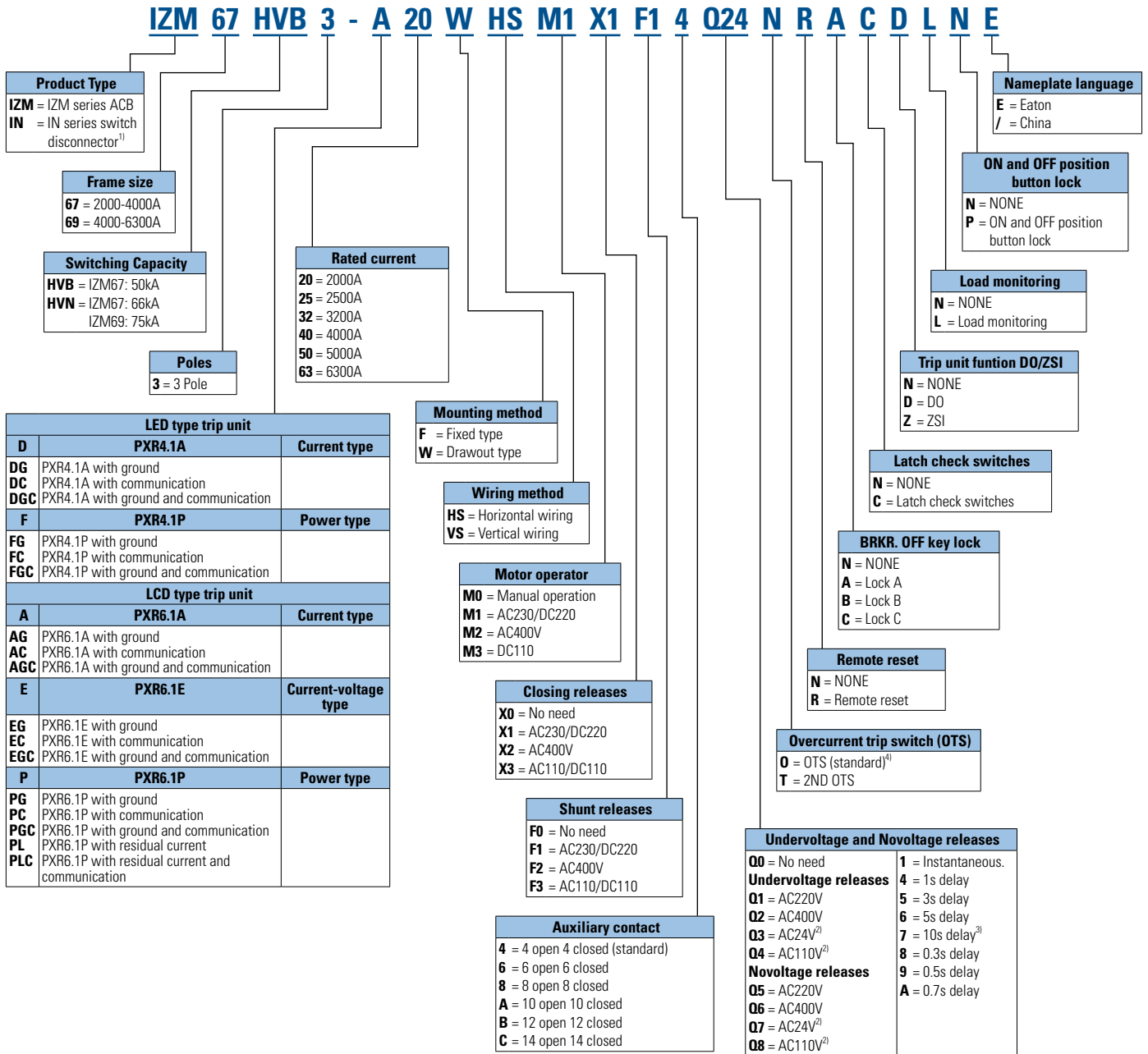
The circuit breaker complies with below standards:

IEC 60947-1 and GB14048.1	Low-voltage switchgear and control equipment: General
IEC 60947-2 and GB14048.2	Low-voltage switchgear and control equipment: Low voltage circuit breaker
IEC 60947-4-1 and GB14048.4	Low-voltage switchgear and control equipment: Contactor and motor starter
GB/T 14597	Climatic environmental conditions at different altitudes for electrical products
GB/T 2421.1	Environmental testing of electrical and electronic products: Overview and guidelines
GB/T 20626.1	Plateau electrical and electronic products for special environmental conditions Part 1: General technical requirements
GB/T 2423.1	Environmental testing of electrical and electronic products Part 2: Test method - Test A: Low temperature
GB/T 2423.2	Environmental testing of electrical and electronic products Part 2: Test method - Test B: High temperature
GB/T 2423.4	Environmental testing of electrical and electronic products Part 2: Test method - Test Db: Alternating damp heat test method
GB/T 2423.17	Environmental testing of electrical and electronic products Part 2: Test method - Test Ka: Salt mist
GB/T 2423.18-2000	Environmental testing of electrical and electronic products Part 2: Test method - Test Kb: Salt mist, alternating (sodium chloride solution)

IZM6 Series Air Circuit Breakers

Model Description

IZM6 Air Circuit Breakers Catalog Number (Full configuration)



Notes: ¹⁾ The IN67/69 is an isolated circuit breaker that removes the IZM67/69 circuit breaker from the PXR series of trip unit in accordance with the requirements of Annex L of GB/T14048.2-2020/IEC 60947-2, and the remaining configurations are consistent with the standard circuit breakers.

²⁾ Not launch.

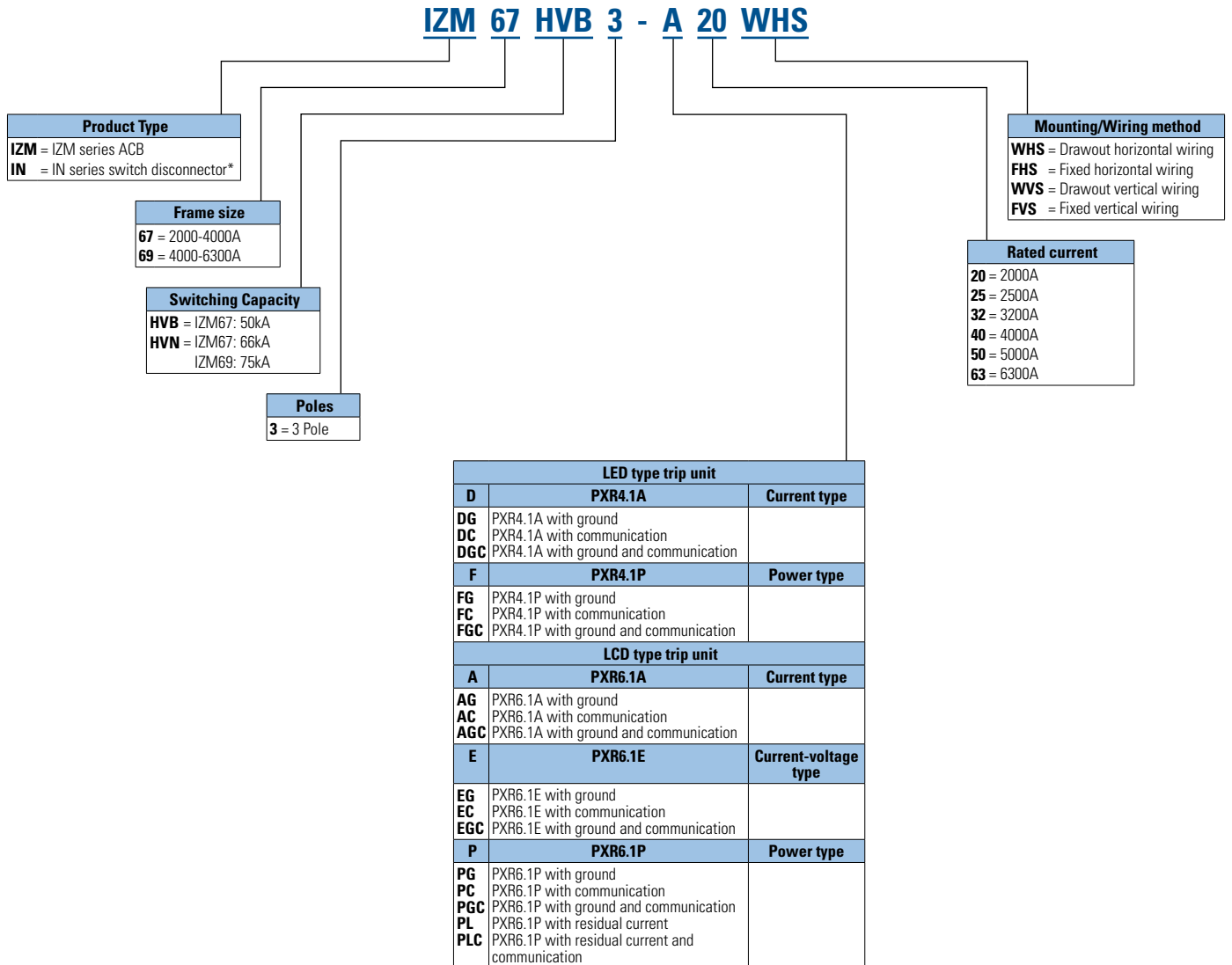
³⁾ Only undervoltage coils are supported.

⁴⁾ Default configuration.

The circuit breaker is equipped with a power supply module as standard.

Before purchasing the catalog number on this page, please contact EATON for the article number.

IZM6 Air Circuit Breakers Catalog Number (Standard configuration)



Drawout type

Devices are equipped as standard: Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4a4b), PXR series intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, terminal block, 220VAC/DC to DC24V power supply module, safety shutter, arc extinguishing cover, and handle.

Fixed type

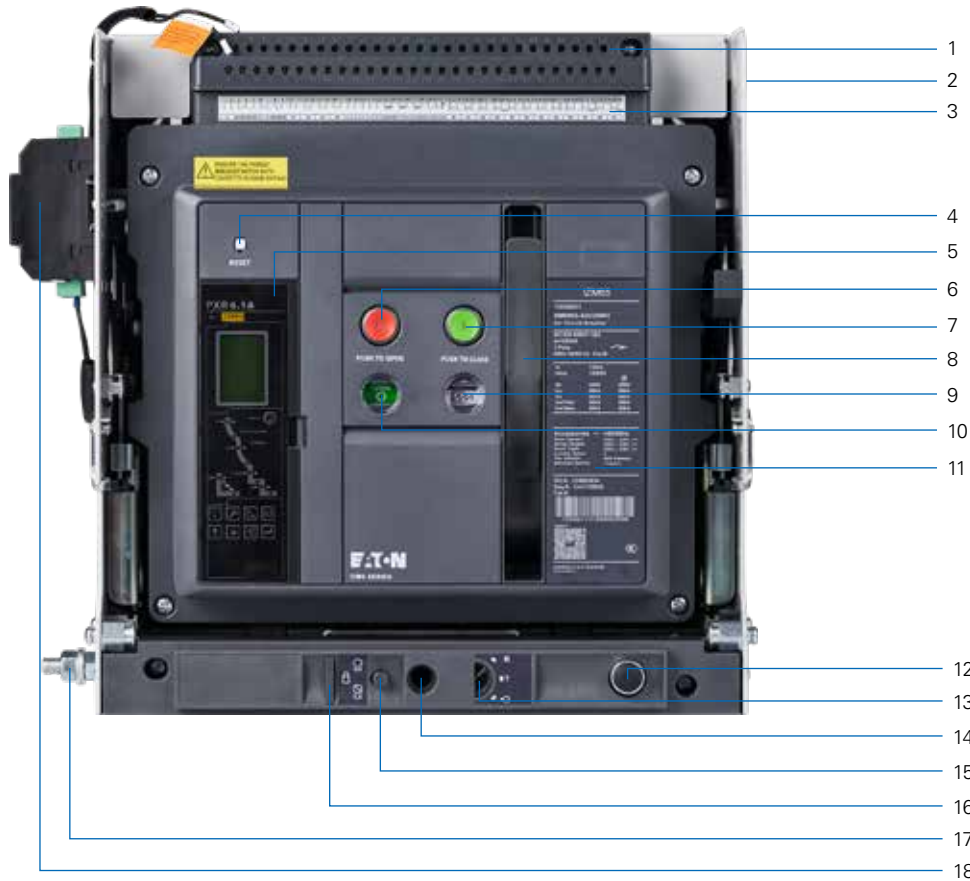
Devices are equipped as standard: Fixed circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4a4b), PXR series intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, terminal block, 220VAC/DC to DC24V power supply module, arc extinguishing cover, and handle.

Notes: *The IN67/69 is an isolated circuit breaker that removes the IZM67/69 circuit breaker from the PXR series of trip unit in accordance with the requirements of Annex L of GB/T14048.2-2020/IEC 60947-2, and the remaining configurations are consistent with the standard circuit breakers.
For power supply input voltages, see IZM6 Operation Manual.
The circuit breaker is equipped with a power supply module as standard.

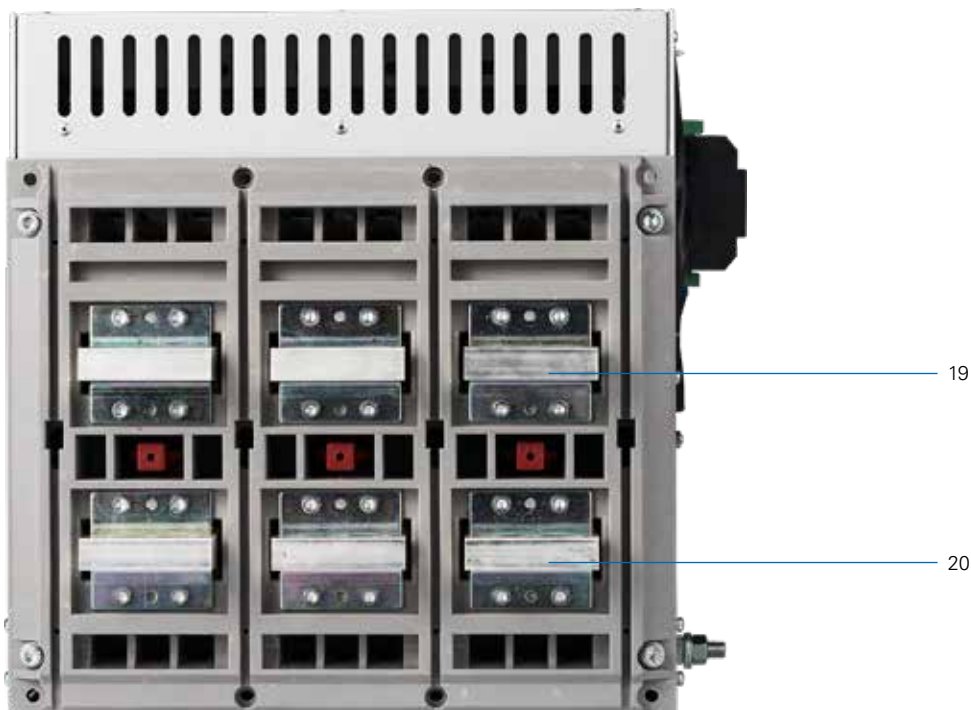
IZM6 Series Air Circuit Breakers

External Structure

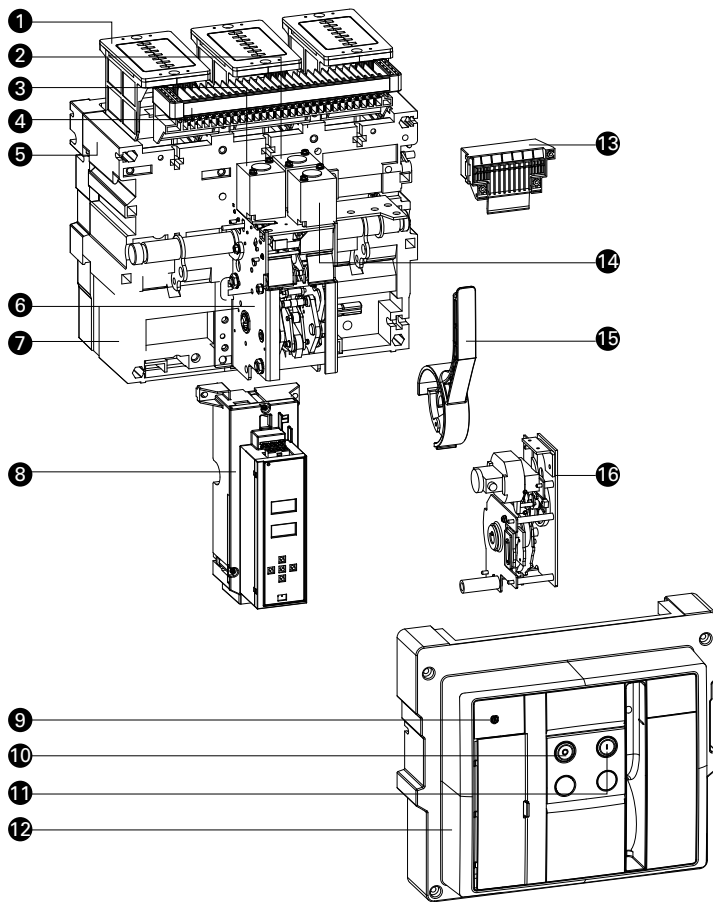
Drawout type



1. Secondary terminal
2. Cassette
3. Secondary terminal wiring nameplate
4. Fault trip indication / reset button
5. Intelligent controller
6. Open button
7. Closed button
8. Manual charging handle
9. "Release" / "Charging" indication
10. Open/Closed indication
11. Data nameplate
12. Lever storage position
13. 3-cell switch
14. Lever driving position
15. Unlock button
16. Disconnected position locking device
17. Ground bolt
18. Power supply module
19. Upper wiring terminal
20. Lower wiring terminal



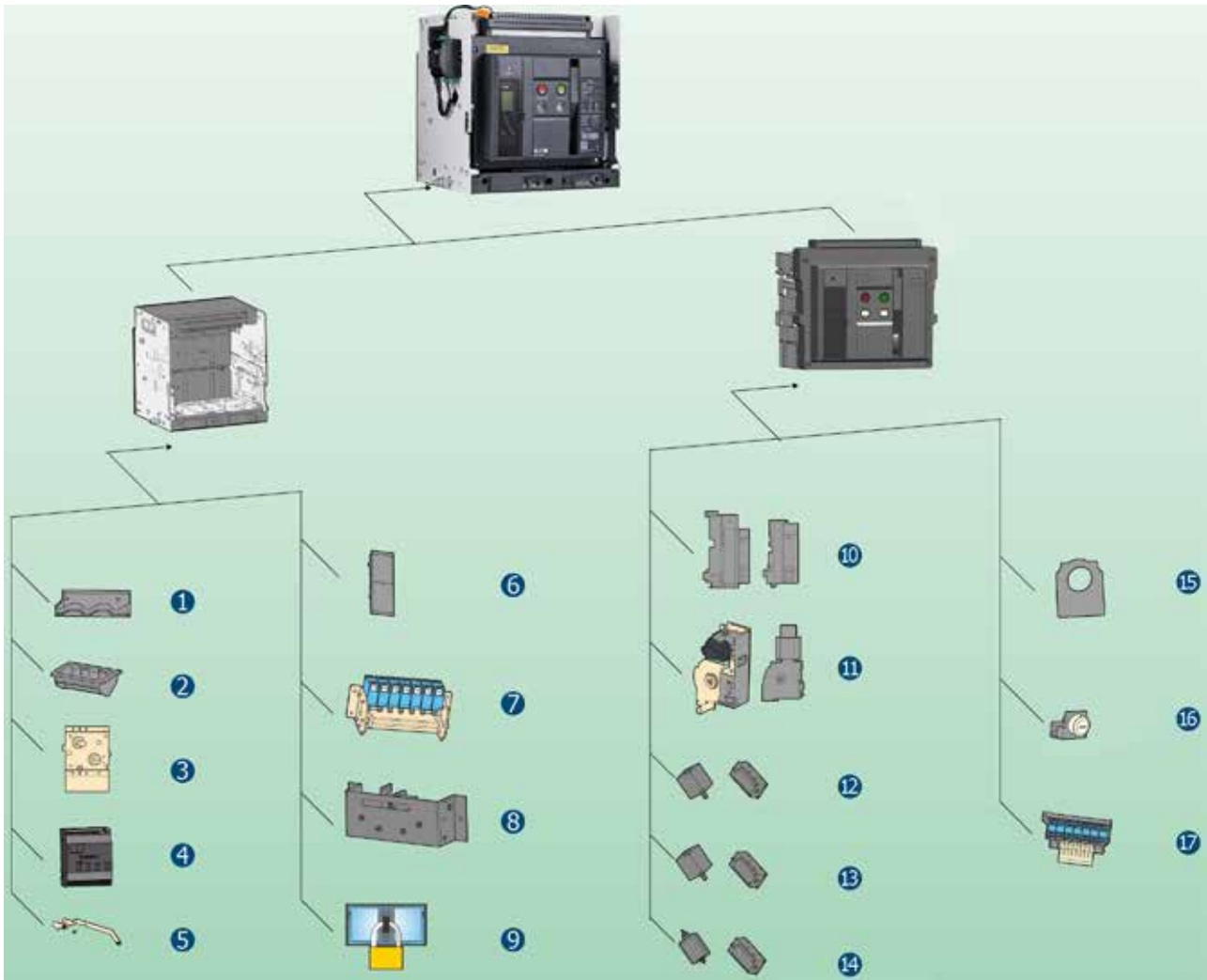
Internal structure



- ❶ Arc chamber
- ❷ Shunt coil
- ❸ Under voltage coil
- ❹ Secondary terminal
- ❺ Delivery handle
- ❻ Operating mechanism
- ❼ Basic device
- ❽ Intelligent controller
- ❾ Reset button
- ❿ Open button
- ⓫ Closed button
- ⓬ Cover
- ⓭ Auxiliary contact
- ⓮ Closing coil
- ⓯ Charging handle
- ⓰ Charging motor

IZM6 Series Air Circuit Breakers

Accessories



IZM6 series

- | | | | |
|-----------------------------------|-------------------------------|----------------------------------|-----------------------|
| 1. Locator | 6. Inter-phase partition | 11. Charging motor | 16. OFF position lock |
| 2. Shroud | 7. External auxiliary contact | 12. Shunt coil | 17. Auxiliary contact |
| 3. Mechanical interlocking | 8. Position indicator | 13. Under (no) voltage trip unit | |
| 4. Power supply module | 9. Button lock | 14. Closing coil | |
| 5. Door interlocking (Not launch) | 10. Intelligent controller | 15. External transformer | |

IZM6 Series Air Circuit Breakers

Key Technical Data and Performance Indicators

Key Technical Data and Performance Indicators



IZM67-4000



IZM69-6300

Standard		IEC/EN 60947	IEC/EN 60947
Certificate		CCC	CCC
RoHS		RoHS	RoHS
Rated peak withstand voltage (U_{imp})		12kV	18kV
Rated insulation voltage (U_i)		1250V	1800V
Rated voltage (U_e)		1140V	1140V
Ambient temperature	Storage	-40 - +85°C	-40 - +85°C
	Operation	-25 - +70°C	-25 - +70°C
Frequency		50/60Hz	50/60Hz
Application category		B	B
Protection level		IP20	IP20
Over voltage category		IV (main circuit)	IV (main circuit)
Pollution degree		III	III
Power supply incoming direction		Upper or lower incoming, subject to specific need (no derating for upper and lower wiring)	
Frame current		4000A	6300A
Rated current (I_n)		2000A, 2500A, 3200A, 4000A	4000A, 5000A, 6300A
Circuit breaker model		HVB HVN	HVN
Rated ultimate short circuit breaking capacity (I_{cu} , kA)	1140V	50	66
Rated operational short circuit breaking capacity (I_{cs} , kA)	1140V	50	66
Rated short time withstand current (I_{cw} , kA)	1s	50	66
Rated short circuit making capacity (I_{cm} , kA)	1140V	105	145
Operating delays (ms)	Closing delay	25	25
	Opening delay	60	60
Durability and mounting characteristics			
Lifespan	Mechanical, w/o maintenance	10000	5000
	Mechanical, w/maintenance	20000	10000
	Electrical, w/o maintenance	5000	2000
Maximum operating frequency (Operations/h)		60	60
Dimensions (H x W x D, mm)	Fixed type, 3-pole	393 x 422 x 290	800 x 390 x 299
	Drawout type, 3-pole	430 x 407 x 395	853 x 390 x 299
Weight (kg)	Fixed type, 3-pole	85Kg	160Kg
	Drawout type, 3-pole	126Kg	240Kg

Notes: The IN67/69 is an isolated circuit breaker that removes the IZM67/69 circuit breaker from the PXR series of trip unit in accordance with the requirements of Annex L of GB/T14048.2-2020/IEC 60947-2, and the remaining configurations are consistent with the standard circuit breakers. The IN67/69 is used in conjunction with an external protection relay (maximum delay of 400ms) to achieve a breaking capability (at U_e) to the I_{cw} (1 second).

IZM6 Series Air Circuit Breakers

Intelligent Controller

Technical Features

Controller

The intelligent controller, a key element of the circuit breaker, offers basic protections such as overload, short circuit, and grounding. It can also protect against over voltage fault, under voltage fault, frequency fault, phase sequence fault, and current imbalance fault.

Controller type



Display type	LED display	LED display	LCD display	LCD display	LCD display
Ordering code	D	F	A	E	P
Mode	Ammeter mode	Power mode	Ammeter mode	Current-voltage mode	Power mode
Model	PXR4.1A	PXR4.1P	PXR6.1A	PXR6.1E	PXR6.1P
	<ul style="list-style-type: none"> • LED display • Current measurement • Overload long Delay time protection • Short circuit short delay time protection • Short circuit instantaneous protection • Ground fault protection (optional) • Current imbalance protection • Thermal memory • Contact wear indicator • Simulated trip function • Fault trip output • MCR • Self-diagnosis • Communication (optional) 	<ul style="list-style-type: none"> • LED display • Current measurement • Overload long delay time protection • Short circuit short delay time protection • Short circuit instantaneous protection • Ground fault protection (optional) • Current imbalance protection • Thermal memory • Voltage protection • Power measurement • Frequency measurement • Contact wear indicator • Simulated trip function • Fault trip output • MCR • Self-diagnosis • Communication (optional) 	<ul style="list-style-type: none"> • LCD display • Current measurement • Overload long delay time protection • Short circuit short delay time protection • Short circuit instantaneous protection • Ground fault protection (optional) • Current imbalance protection • Thermal memory • Contact wear indicator • Simulated trip function • Fault trip output • MCR • Self-diagnosis • Communication (optional) 	<ul style="list-style-type: none"> • LCD display • Current and voltage measurement • Overload long delay time protection • Short circuit short delay time protection • Short circuit instantaneous protection • Ground fault protection (optional) • Current imbalance protection • Thermal memory • Voltage protection • Frequency measurement • Contact wear indicator • Simulated trip function • Fault trip output • MCR • Self-diagnosis • Communication (optional) 	<ul style="list-style-type: none"> • LCD display • Current and voltage measurement • Overload long delay time protection • Short circuit short delay time protection • Short circuit instantaneous protection • Ground fault protection (optional) • Residual current protection (optional) • Current imbalance protection • Thermal memory • Voltage protection • Demand protection • Reverse power protection • Energy measurement • Power measurement • Frequency measurement • Contact wear indicator • Simulated trip function • Fault trip output • MCR • Self-diagnosis • Communication (optional)

Controller function

Trip unit model		PXR4.1A	PXR4.1P
Trip unit model selection code		D	F
Display interface	LED number and symbol display	√	√
Basic protections	Overload long delay time protection (multi-curve)	√	√
	Short circuit short delay time protection	√	√
	Short circuit instantaneous protection	√	√
	Ground protection	Optional	Optional
Other protections	Overload thermal memory	√	√
	Short delay thermal memory	√	√
	Neutral phase protection (4P)	√	√
	Current imbalance	√	√
	MCR	√	√
	Load monitoring	Optional	Optional
Advanced protections	Under/over voltage protection	–	√
	Phase sequence protection	–	√
	Under/over frequency protection	–	√
	Zone selective interlocking	–	–
Measurement	Current measurement (phase pole, N pole, ground)	√	√
	Voltage measurement (phase voltage, line voltage)	–	√
	Frequency measurement	–	√
	Power measurement (active power)	–	√
	Power factor measurement	–	√
	Energy measurement (active energy)	–	√
Maintenance	LED fault status indication	√	√
	Fault record and query (only the last time)	√	√
	Fault trip signal output	√	√
	Self-diagnosis function	√	√
	Simulated trip test function	√	√
	Contact wear equivalent (alarm)% query	√	√
	Number of operations query	√	√
Others	Clock function	√	√
	Signal unit 4DO (programmable)	Optional	Optional
	Communication (Modbus-RTU)	Optional	Optional

“√” = The function is available; “–” = The function is not available;
For optional functions, please contact local Eaton sales representatives.

IZM6 Series Air Circuit Breakers

Intelligent Controller

Controller function (continued)

Trip unit model		PXR6.1A	PXR6.1E	PXR6.1P
Trip unit model selection code		A	E	P
Display interface	LCD number and symbol display	✓	✓	✓
Basic protections	Overload long delay time protection (multi-curve)	✓	✓	✓
	Short circuit short time protection	✓	✓	✓
	Short circuit instantaneous protection	✓	✓	✓
	Ground protection	Optional	Optional	Optional
	Residual current protection	–	–	Optional
Other protections	Overload thermal memory	✓	✓	✓
	Short delay thermal memory	✓	✓	✓
	Neutral phase protection (4P)	✓	✓	✓
	Current imbalance and phase loss protection	✓	✓	✓
	MCR	✓	✓	✓
	Load monitoring ¹⁾	Optional	Optional	Optional
Advanced protections	Under/over voltage protection	–	✓	✓
	Voltage imbalance protection	–	✓	✓
	Phase sequence protection	–	✓	✓
	Under/over frequency protection	–	✓	✓
	Demand protection (current, power)	–	–	✓
	Inverse power protection	–	–	✓
	Zone selective interlocking ¹⁾	Optional	Optional	Optional
Measurement	Current measurement (phase pole, N pole, ground)	✓	✓	✓
	Voltage (phase voltage, line voltage, voltage imbalance)	–	✓	✓
	Phase sequence detection	–	✓	✓
	Frequency measurement	–	✓	✓
	Power measurement (active, reactive, apparent)	–	–	✓
	Power factor measurement	–	–	✓
	Energy measurement (active, reactive, apparent)	–	–	✓
	Demand measurement (current, power)	–	✓ (only current)	✓
Maintenance	LED fault status indication	✓	✓	✓
	Fault record (8) and query	✓	✓	✓
	Historical peak current record	✓	✓	✓
	Alarm history record query	✓	✓	✓
	Displacement record	✓	✓	✓
	Fault trip signal output	✓	✓	✓
	Self-diagnosis function	✓	✓	✓
	Simulation trip test function	✓	✓	✓
	Contact wear equivalent (alarm)% query	✓	✓	✓
	Number of operations query	✓	✓	✓
	Clock function	✓	✓	✓
	Signal unit 4DO (programmable) ¹⁾	Optional	Optional	Optional
	Communication (Modbus-RTU)	Optional	Optional	Optional

“✓” = The function is available;

“–” = The function is not available;

For optional functions, please contact local Eaton sales representatives.

¹⁾ For ordering information, please contact local Eaton sales representative.

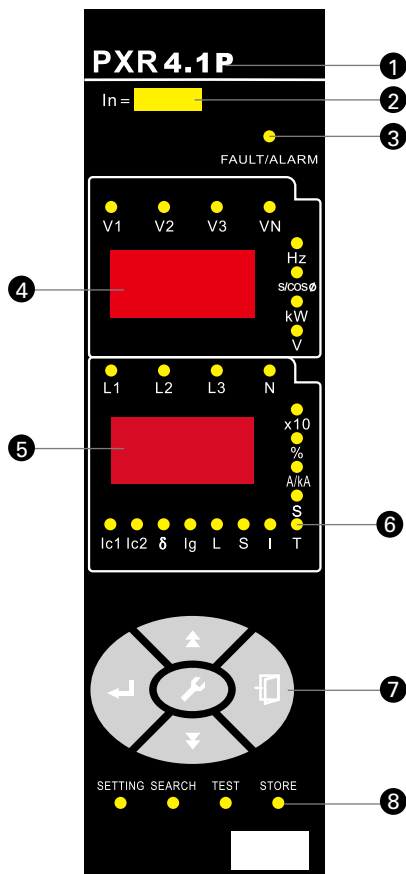
PXR4.1A/PXR4.1P Intelligent Trip Unit

4.1A Basic functions

- Overload long delay time, short circuit short delay time, short circuit instantaneous protection
- Ground protection (optional)
- Current measurement
- Functional test
- Fault memory
- Thermal memory
- Self-diagnosis
- Fault status indication and numerical display
- Signal contact output
- MCR
- Load monitoring (optional)
- Contact wear indication
- Communication function (optional)

4.1P Add-on functions

- Voltage measurement
- Power measurement
- Energy measurement
- Frequency measurement
- Voltage protection

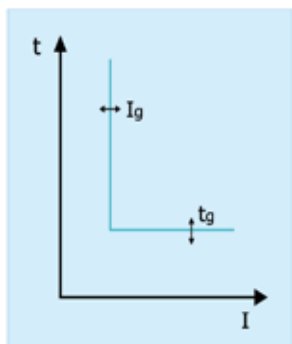
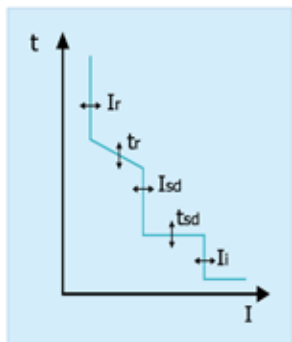


- 1 Controller model
- 2 Rated current
- 3 Fault / alarm indicator
- 4 Power meter window
- 5 Ammeter window
- 6 Current protection type indication
- 7 Setting keyboard
- 8 Status indication

IZM6 Series Air Circuit Breakers

Intelligent Controller

PXR4.1A/PXR4.1P



		PXR4.1A	PXR4.1P
Ordering code		D	F
Display type		LED	LED
Long delay protection (L)			
Long delay set point (Tolerance: 10%)	$(I_l) \times I_n$	0.4-1+OFF (Step is 1A or 2A)	
Curve type		I^2t curve	
Long delay time (Tolerance: 15%)	$t_r (6 \times I_l)$	0.5, 1, 1.9, 3.8, 7.5, 15, 22.5, 30, 37.5, 45, 52.5, 60	
Long delay time (Tolerance: 15%)	$t_r (1.5 \times I_l)$	8, 15, 30, 60, 120, 240, 360, 480, 600, 720, 840, 960	
Long delay time (Tolerance: 15%)	$t_r (7.2 \times I_l)$	0.35, 0.65, 1.3, 2.6, 5.21, 10.42, 15.63, 20.83, 26.04, 31.25, 36.46, 41.67	
Short delay protection (S)			
Short delay set point (Tolerance: 10%)	$I_{sd} \times I_r$	1.5-15+OFF (Step is 1A or 2A)	
Curve type		I^2t curve	
Short delay time (t_{sd}) (Tolerance: 15%)	Fixed time	0.1, 0.2, 0.3, 0.4+OFF	
Short delay time (t_{sd}) (Tolerance: 15%)	Inverse time $I^2t/10 (6 \times I_l)$	0.05, 0.1, 0.19, 0.38, 0.75, 1.5, 2.25, 3, 3.75, 4.5, 5.25, 6	
Short delay time (t_{sd}) (Tolerance: 15%)	Inverse time $I^2t/10 (1.5 \times I_l)$	0.8, 1.5, 3, 6, 12, 21, 36, 48, 60, 72, 84, 96	
Short delay time (t_{sd}) (Tolerance: 15%)	Inverse time $I^2t/10 (7.2 \times I_l)$	0.035, 0.065, 0.13, 0.26, 0.521, 1.042, 1.563, 2.083, 2.604, 3.125, 3.646, 4.167	
Instantaneous protection (I)			
Instantaneous protection set point (Tolerance: 15%)	$I_l \times I_n$	11 _n -15 _n +OFF (Step is 1A or 2A)	
Ground fault protection (G)			
Ground fault protection set point (A) (Tolerance: 10%)	$\times I_n$	0.2-1+OFF (Step is 1A or 2A)	
Ground fault protection set point (A) (Tolerance: 10%)	$I_g \times I_n$	0.2-1+OFF (Step is 1A or 2A)	
Ground fault delay time (t_g) (Tolerance: 10%) (Inherent tolerance: 40ms)	I_{tg}	0.1-0.5s (Step is 0.1s)	
Ground fault delay time (t_g) $t = I^2t @ 0.625 (t_g)$ (Tolerance: 10%)		0.1-0.5s (Step is 0.1s)	
Under voltage protection ¹⁾			
Under voltage protection set point (Tolerance: 10%)		N/A	10% U_n ~70% U_n +OFF (Step is 1V)
Under voltage protection delay time (Tolerance: 10%) (Inherent tolerance: 40ms)		N/A	0.2-60s (Step is 0.1s or 1s)
Over voltage protection ¹⁾			
Over voltage protection set point (Tolerance: 10%)		N/A	110% U_n ~130% U_n +OFF (Step is 1V)
Over voltage protection delay time (Tolerance: 10%) (Inherent Tolerance: 40ms)		N/A	0.2-60s (Step is 0.1s or 1s)

¹⁾ Voltage protection of Phase A, B, C and N is connected to terminals with the maximum voltage of 400V. If above 400V, a voltage module is needed.

PXR6.1A / PXR6.1E / PXR6.1P

6.1A Basic functions

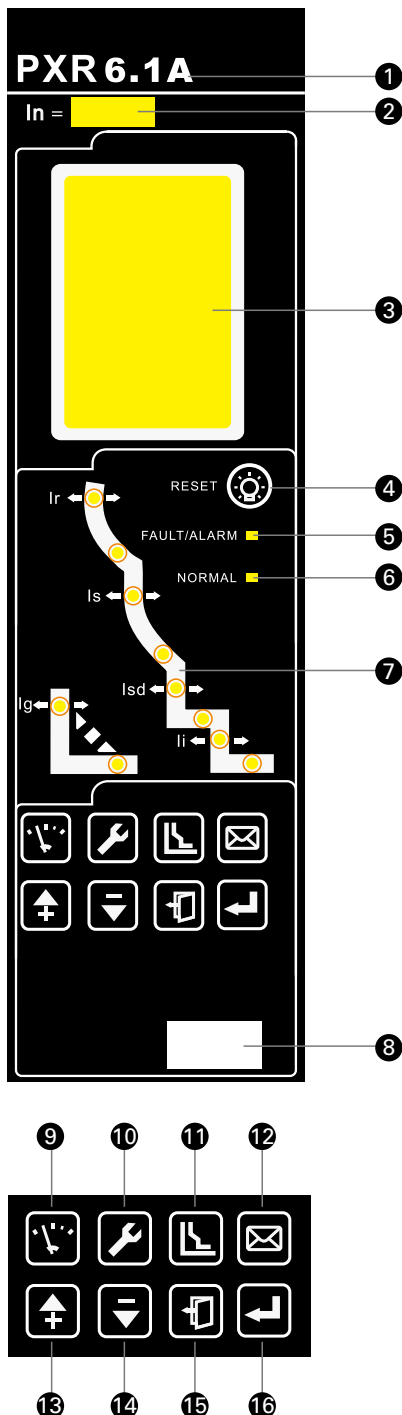
- Overload long delay time, short circuit short delay time, short circuit instantaneous protection
- Ground protection (optional)
- Communication function (optional)
- Current measurement
- Functional test
- Fault memory
- Thermal memory
- Self-diagnosis
- Fault status indication and numerical display
- Signal contact output
- MCR
- Load monitoring (optional)
- Contact wear indication

6.1E Add-on functions

- Voltage measurement
- Over-under voltage protection
- Over frequency protection
- Under frequency protection
- Phase sequence protection
- Voltage measurement
- Voltage imbalance measurement
- Frequency measurement
- Demand measurement (current)
- Phase sequence measurement

6.1P Add-on functions

- Reverse power measurement
- Power measurement
- Energy measurement
- Power factor measurement
- Demand measurement (power)

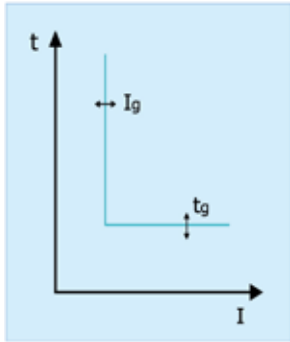
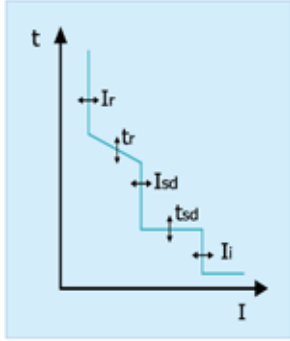


- 1 Controller model
- 2 Rated current
- 3 LCD interface display
- 4 Fault and alarm reset button
- 5 Fault / alarm indicator
The LED light is not lit on during normal operation; the red LED light flashes quickly during a fault trip, and remains lit on in the event of an alarm
- 6 Normal status indicator
The green LED light keeps flashing when the controller is powered on and in normal operating status
- 7 Protection curve
There is a red LED indicator hidden in the curve. During a fault tripping, the corresponding LED light flashes to indicate the fault type; during protection parameter setting up, the LED light is always on to indicate the item being set
- 8 Test port
A 10-pin testing portal is available at the bottom of the front panel. A plug-in portable power source box or a detection unit can be inserted
- 9 Measurement: Function Key 1, to switch to default main menu under Measurement (which is, the Left key in the password input interface)
- 10 Set up: Function Key 2, to switch to the main menu of parameter setting up (which is, the Right key in the password input interface)
- 11 Protection: Function Key 3, to switch to the main menu of protection parameter setting up
- 12 Information: Function Key 4, to switch to the main menu of history record and maintenance
- 13 Up: Move up the menu content from the current level, or change the selected parameter up
- 14 Down: Move down the menu content from the current level, or change the selected parameter down
- 15 Exit: Exit to the previous-level menu from the current level, or cancel the selection of the current parameter
- 16 Select: Enter the next-level menu from the current level, or select the current parameter to save the modified value

IzM6 Series Air Circuit Breakers

Intelligent Controller

PXR6.1A / PXR6.1E / PXR6.1P



Overload long delay time

Acting current set point I_l	Current tolerance $\pm 10\%$	$(0.4 \sim 1.0) \times I_n + \text{OFF}$ (Step is 1A or 2A)							
Acting time t_l	Current	Action time							
Tolerance $\pm 15\%$	$\leq 1.05I_l$	No action within 2 hours							
	$> 1.20I_l$	Action within 1 hour							
Curve type (Pr by default)		Setting time t_r (Coefficient K in brackets)							
Standard inverse time $t = K/(N^{0.02-1})$		0.61 (0.005)	0.98 (1.0)	1.47 (0.012)	2.46 (0.02)	3.68 (0.03)	4.91 (0.04)	6.14 (0.05)	9.21 (0.075)
		11.1 (0.09)	17.2 (0.14)	24.6 (0.2)	36.8 (0.3)	49.1 (0.4)	61.4 (0.5)	73.7 (0.6)	86 (0.6)
Fast inverse time $t = K/(N-1)$		2 (1)	3.2 (1.6)	4.8 (2.4)	8 (4)	12 (6)	16 (8)	20 (10)	27 (13.5)
		36 (18)	56 (28)	80 (40)	120 (60)	160 (80)	200 (100)	240 (120)	280 (140)
Extremely fast inverse $t = K/(N^2-1)$		8 (10)	12.8 (16)	19.2 (24)	32 (40)	48 (60)	64 (80)	80 (100)	108 (135)
		144 (180)	224 (280)	320 (400)	480 (600)	640 (800)	800 (1000)	960 (1200)	1040 (1300)
Extremely fast inverse $t = (K/1.15) \times \log_e [N^2/(N^2-1.15)]$		6.22 (10)	9.96 (16)	14.9 (24)	24.9 (40)	37.3 (60)	49.8 (80)	62.2 (100)	84 (135)
		112 (180)	174 (280)	249 (400)	373 (600)	498 (800)	622 (1000)	747 (1200)	809 (1300)
HV fuse compatible $t = K/(N^4-1)$		2.46 (10)	3.94 (16)	5.9 (24)	9.85 (40)	14.8 (60)	19.7 (80)	24.6 (100)	33.2 (135)
		44.3 (180)	68.9 (280)	98.5 (400)	147 (600)	197 (800)	246 (1000)	295 (1200)	320 (1300)
IFT $t = (1.5/N)^2 \times K$		8 (8)	15 (15)	30 (30)	60 (60)	120 (120)	240 (240)	360 (360)	480 (480)
		600 (600)	720 (720)	840 (840)	960 (960)				

Notes: $N = I/I_l$ (I is the actual fault current, I_l is the overload current set value). The above set time value is the action delay time when $I = 1.5I_l$. As the current increases, the delay time will be shortened accordingly and can be calculated to the curve formula.

Thermal memory protection Instantaneous, 10m,20m,30m,45m,1h,2h,3h+OFF (can be eliminated upon power off)

Short circuit short delay time

Acting current set point I_{sd}	Current tolerance $\pm 10\%$	$(1.5 \sim 15) \times I_l + \text{OFF}$ (Step is 1A or 2A)							
Acting time t_{sd}	Fixed time delay set point	0.1~0.4s (Step is 0.1s)							
Tolerance $\pm 15\%$	Inverse time delay	The curve is the same as the overload long delay curve; the curve speed is 10 times faster than the overload long delay's (the time calculated to the overload delay curve formula divided by 10 is the short delay inverse delay time)							
	Thermal memory protection	Subject to long delay settings							

Notes: When the inverse time and fixed time protection are both enabled, the inverse time current set point must be less than the fixed time current set point. Otherwise, the inverse time function will automatically fail, and the actual delay time is not less than the fixed time's set time.

Short circuit instantaneous

Acting current set point I_i	Current tolerance $\pm 10\%$	$(1 \sim 15) \times I_n + \text{OFF}$ (Min. $1I_n$)							
Action characteristics		No action when $\leq 0.85I_i$							
		Action when $> 1.15I_i$							

Grounding protection

Acting current setting I_g	Current tolerance $\pm 10\%$	$(0.2 \sim 1.0) \times I_n + \text{OFF}$ (Min. 100A)							
Action characteristics		No action when $< 0.8I_g$							
		Delay action when $\geq 1.0I_g$							
Action time t_g	Fixed time	0.1~0.5s+OFF (Step is 0.1)							
	Tolerance $\pm 15\%$	Inverse time (ON)	Fixed time when $I > 0.625I_g$ Inverse time when $I \leq 0.625I_g$						
		Inverse time formula	$t = (0.625I_g)^2 t_g / I^2$ $t = \text{delay time}, T_g = \text{set delay time}, I_g = \text{rated current}$						

Action mode: Trip + OFF

Ground alarm (ground alarm is independent from ground protection; both functions have their own independent parameter settings and can co-exist at the same time)

Alarm action setting	Current	$(0.2 \sim 1.0) \times I_n$ (Min. 100A)							
	Time	0.1~1s (Step is 0.1)							
Alarm dismiss setting	Current	$(0.2 \sim 1.0) \times I_n$ (Min. 100A)							
	Time	0.1~1s (Step is 0.1)							

Neutral-pole protection

Acting current setting I_n	Current tolerance $\pm 10\%$	$(0.5, 1.0, 1.6, 2.0) \times I_n + \text{OFF}$							
Action time		Same as the overload long delay time							

Current imbalance protection

Protection setting	10%~60% (Step is 1%)								
Delay time	0.2s~60s (Step is 0.1s)								
Protection return setting	10%~start value (Step is 1%)								
Delay time	10s~200s (Step is 1s)								
Action characteristics or alarm characteristics		No action when $\leq 0.9\delta$							
		Delay action or alarm when $> 1.1\delta$							

Action mode: Trip + alarm + OFF

Load monitoring

Method 1	Setting current I_{c1}, I_{c2}	$(0.2 \sim 1) \times I_n$ (min. 100A, Step is 1A)							
	Inverse delay time t_{c1}, t_{c2}	$(20\% \sim 80\%) \times t_l$							
Method 2	Setting current I_{c1} (unload value)	$(0.2 \sim 1) \times I_n$ (min. 100A)							
	Setting current I_{c2} (return value)	$0.2 \times I_n \sim I_{c1}$							
	Inverse delay time t_{c1}	$(20\% \sim 80\%) \times t_l$							
	Fixed delay time t_{c2}	10s~600s							

Other protection features of the intelligent controller

Voltage imbalance protection

Action threshold	2%~30% (step is 1%)	
Action delay time (s)	0.2~60 (step is 0.1)	
Return threshold	2%~ start value (step is 1%)	The set point is available only when the execution mode is set as "Alarm", and return value must be less than or equal to start value
Return delay time (s)	0.2~60 (step is 0.1)	
Action or alarm characteristics (Delay tolerance \pm 10%)	Actual voltage imbalance/set point \geq 1.1	Fixed time action or alarm
	Actual voltage imbalance/set point $<$ 0.9	No action or alarm
Voltage imbalance alarm return characteristics (Delay tolerance \pm 10%)	Actual voltage imbalance/set point \leq 0.9	Return
	Actual voltage imbalance/set point $>$ 1.1	No return
Alarm contact output	"Voltage imbalance alarm" contact output can be added when the execution mode is set as Alarm	

Under voltage protection ¹⁾

Action threshold (V)	100~return threshold (step is 1)	
Action delay time (s)	0.2~60 (step is 0.1)	
Return threshold (V)	Action threshold ~ 950 (step is 1)	The set point is available only when the execution mode is set as "Alarm", and return value must be less than or equal to start value
Return delay time (s)	0.2~60 (step is 0.1)	
Action or alarm characteristics (Delay tolerance \pm 10%)	U_{max} / action threshold $<$ 0.9	Fixed time action or alarm
	U_{max} / action threshold \geq 1.1	No action or alarm
Under voltage alarm return characteristics (Delay tolerance \pm 10%)	U_{min} / action threshold $>$ 1.1	Return
	U_{min} / action threshold \leq 0.9	No return
Alarm contact output	"Under voltage alarm" contact output can be added when the execution mode is set as Alarm	

Over voltage protection ¹⁾

Action threshold (V)	Return threshold ~ 950 (step is 1)	
Action delay time (s)	0.2~60 (step is 0.1)	
Return threshold (V)	220~action threshold (step is 1)	The set point is available only when the execution mode is set as "Alarm", and return value must be less than or equal to start value
Return delay time (s)	0.2~60 (step is 0.1)	
Action or alarm characteristics (Delay tolerance \pm 10%)	U_{min} / action threshold \geq 1.1	Fixed time action or alarm
	U_{min} / action threshold $<$ 0.9	No action or alarm
Over voltage alarm return characteristics (Delay tolerance \pm 10%)	U_{max} / action threshold \leq 0.9	Return
	U_{max} / action threshold $>$ 1.1	No return
Alarm contact output	"Over voltage alarm" contact output can be added when the execution mode is set as Alarm	

Demand protection

Action threshold (V)	(0.2~1.0) \times I_n (step is 2)	
Action delay time (s)	15~1500 (step is 0.1)	
Return threshold (V)	0.2 I_n ~ start value (step is 2)	The set point is available only when the execution mode is set as "Alarm", and return value must be less than or equal to start value
Return delay time (s)	15~3000 (step is 1)	
Action or alarm characteristics (Delay tolerance \pm 10%)	I / set point \geq 1.1	Fixed time action or alarm
	I / set point $<$ 0.9	No action or alarm
Demand current protection alarm return characteristics (Delay tolerance \pm 10%)	I / set point $<$ 0.9	Return
	I / set point $>$ 1.1	No return
Alarm contact output	"Demand current protection alarm" contact output can be added when the execution mode is set as Alarm	

Phase sequence protection

Action phase sequence set range	$\Delta \phi$: A, B, C / $\Delta \phi$: A, C, B	
Alarm contact output	"Phase sequence fault alarm" contact output can be added when the execution mode is set as Alarm	
Protection execution mode	Alarm / Trip/ OFF	

Frequency protection

Parameter setting range	Action threshold	Under frequency	45~ Return value (step is 0.1Hz)	The set point is available only when the execution mode is set as "Alarm"
		Over frequency	Return value ~65 (step is 0.1Hz)	
	Action delay time	0.2~5.0s (step is 0.1s)		
		Return threshold	Under frequency	
	Over frequency		45Hz~ Return value (step is 0.1Hz)	
	Return delay time	0.2~36.0s (step is 0.1s)		
Alarm contact output	"Under frequency alarm" and "Over frequency alarm" contact outputs can be added when the execution mode is set as Alarm			
Protection execution mode	Alarm / Trip/ OFF			

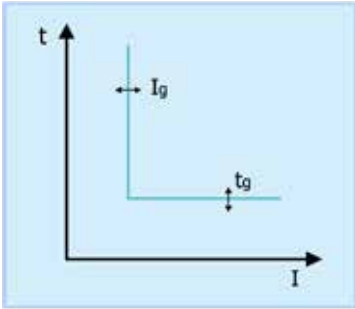
¹⁾ Voltage protection of Phase A, B, C and N is connected to terminals with the maximum voltage of 400V. When above 400V, a voltage module must be equipped

IZM6 Series Air Circuit Breakers

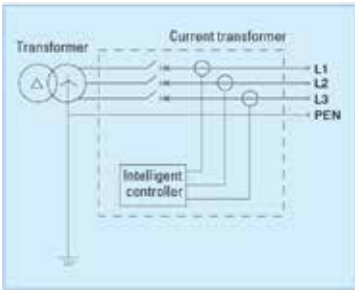
Intelligent Controller

Intelligent Controller's Protection Function Description

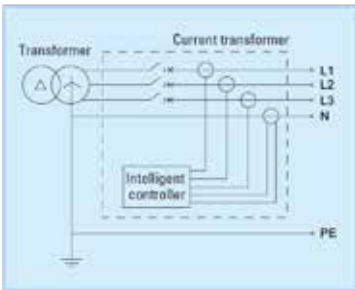
Ground fault protection characteristics



Method 1



Method 2



Ground fault protection

- Ground fault fixed time or inverse time protection, with adjustable setting current I_g
- Adjustable delay time t_g
- Only alarm and no breaking after switched off (OFF)
- Ground fault protection method:
 - Method 1
 - Method 2
 - Method 3

Method 1: TN-C and TN-C-S power distribution systems use three-pole circuit breakers with no neutral current transformer.

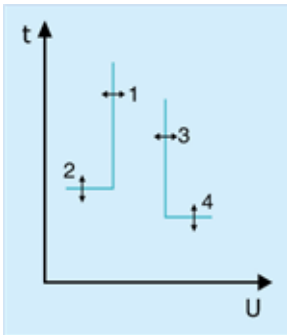
- The ground fault protection signal takes the vector sum of the three phase currents
- The protection characteristics is fixed time or inverse time protection
- Only applicable when the three-phase imbalanced current and harmonic current flowing through the PEN neutral protection line are very small

Method 2: TN-S power distribution system uses a three-pole circuit breaker with an current sensor for neutral conductor.

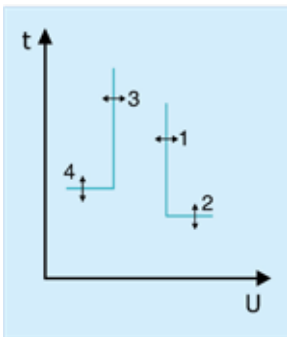
- The ground fault protection signal takes the vector sum of the three phase currents and the N-phase current
- The protection characteristics is fixed or inverse time protection

Notes: The length of the transformer conductor is not more than 2m

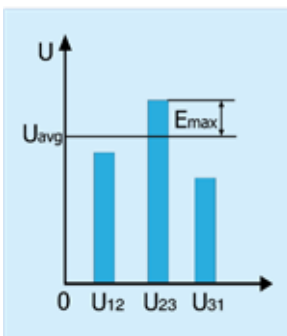
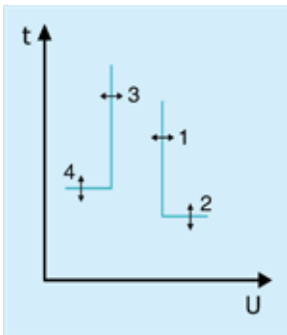
Under voltage protection acting principle



Over voltage protection acting principle



Voltage imbalance



1. Action threshold
2. Action delay time
3. Return threshold
4. Return delay time

Voltage protection

Under voltage protection

The intelligent controller measures the RMS value of the primary circuit voltage. When the three line voltages are all less than the set point, that is, when the maximum value of the three line voltages is less than the under voltage protection threshold, the undervoltage protection will act; when the minimum value of the three line voltages are greater than the return value, the alarm action will return.

Action characteristics:

1. When the maximum voltage is less than the action threshold (1), the alarm or trip delay will be activated;
2. At the end of the action delay time (2), an alarm or trip signal will be issued, and the under voltage fault protection will act;
3. When the minimum voltage is greater than the return threshold (3), the return delay will be activated;
4. At the end of the return delay time (4), the alarm will be removed and the under voltage fault protection will return.

Over voltage protection

The intelligent controller measures the RMS value of the primary circuit voltage. When the three line voltages are all greater than the set value, that is, when the minimum value of the three line voltages is greater than the over voltage protection threshold, the over voltage protection will act; when the three line voltages are less than the return value, the alarm action will return.

Action characteristics:

1. When the minimum voltage is greater than the action threshold (1), the alarm or trip delay will be activated;
2. At the end of the action delay time (2), an alarm or trip signal will be issued, and the over voltage fault protection will act;
3. When the execution mode is set as alarm, after the alarm action, the return delay will be activated when the minimum voltage is less than the return threshold (3);
4. At the end of the return delay time (4), the alarm will be removed and the over voltage fault protection will return.

Voltage imbalance protection

Voltage imbalance protection enables protective actions based on the imbalance value between the three line voltages. The intelligent controller measures the voltage imbalance. When the voltage imbalance is greater than the action threshold, the protection will act; when the voltage imbalance is less than the return threshold, the alarm action will return.

Action characteristics:

1. When voltage imbalance is greater than the action threshold (1), an alarm or trip delay will be activated;
2. At the end of the action delay time (2), an alarm or trip signal will be issued, and voltage imbalance fault protection will act;
3. When the execution mode is set as alarm, after the alarm action, the return delay will be activated when the voltage imbalance is less than the return threshold (3);
4. At the end of the return delay time (4), the alarm will be removed and the voltage imbalance fault protection will return.

The voltage imbalance is calculated as below:

$$U_{\text{unbal}} = \frac{|E_{\text{max}}|}{U_{\text{avg}}} \times 100\%$$

$$U_{\text{avg}} = \frac{(U_{12} + U_{23} + U_{31})}{3}$$

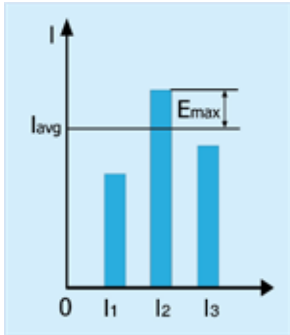
E_{max}: The maximum difference between each phase voltage and average value.

U_{avg}: The average value of the RMS sum of the three-phase line voltages.

IZM6 Series Air Circuit Breakers

Intelligent Controller

Current imbalance



Current imbalance protection

The current imbalance protection performs against open phase, phase loss and 3-phase current imbalance based on the imbalance between three phase currents:

The current imbalance is calculated as follows:

$$I_{\text{unbal}} = \frac{|E_{\text{max}}|}{I_{\text{avg}}} \times 100\%$$

$$I_{\text{avg}} = \frac{(I_{12} + I_{23} + I_{31})}{3}$$

E_{max} = The maximum difference between each phase current and I_{avg} .

I_{avg} = The average value of the three-phase current RMS

Reverse power protection

It is used for generator protection. When the power is reversed, the generator may be damaged if it is running. If the power flows in a direction opposite to the set power's direction, and is greater than the action threshold set point, the circuit breaker will trip or send out an alarm signal after the action delay time (fixed time action). Then, if the reverse power in the circuit is less than the return threshold set point, the circuit breaker will remove the alarm signal after the return delay time (fixed time action). The reverse power protection function can be set to Enabled or Disabled. When enabled, it includes sending an alarm signal or tripping.

Current demand protection

It is mainly used for process controlling need. When the demand current of a certain phase is greater than the action threshold set point, the circuit breaker will trip or send out an alarm signal after the action delay time (fixed time action). Then, if the demand current of this phase is less than the return threshold set point, the circuit breaker will remove the alarm signal after the return delay time (fixed time action).

The current demand protection function can be set to Enabled or Disabled. When enabled, it includes sending an alarm signal or tripping.

Over frequency protection

It is used for generator protection. When the circuit frequency is greater than the action threshold set point, the circuit breaker will trip or send out an alarm signal after the action delay time (fixed time action). Then, if the circuit frequency is less than the return threshold set point, the circuit breaker will remove the alarm signal after the return delay time (fixed time action).

The over frequency protection function can be set to Enabled or Disabled. When enabled, it includes sending an alarm signal or tripping.

Under frequency protection

It is used for generator protection. When the circuit frequency is less than the action threshold set point, the circuit breaker will trip or send out an alarm signal after the action delay time (fixed time action). Then, if the circuit frequency is greater than the return threshold set point, the circuit breaker will remove the alarm signal after the return delay time (fixed time action).

The under frequency protection function can be set to Enabled or Disabled. When enabled, it includes sending an alarm signal or tripping.

Phase sequence protection

It is used in occasions where phase sequence is required. When it is detected that the phase sequence is the same as the action threshold, it will act instantaneously, and the circuit breaker will trip or send out an alarm signal. If one-phase or multi-phase voltage does not exist, this function will automatically exit.

The phase sequence protection function can be set to Enabled or Disabled. When enabled, it includes sending an alarm signal or tripping.

Contact wear indication

Current contact wear status can be displayed on the intelligent controller panel. The value displayed on the controller is 100% upon delivery from factory, indicating that the contact is not worn. When the value drops to 60%, an alarm signal will be issued to remind the user to take timely maintenance measures. After the contact is replaced, the initial wear value can be restored through setting up.

Self-diagnosis

The intelligent controller can diagnose its own faults, including ambient over temperature, E²PROM data error, A/D sampling error, and circuit breaker failure to act.

MCR

Making and breaking function (MCR): Switch off immediately due to short circuit fault during circuit breaker closing or controller initialization upon powering on.

Signal contact (DO) function (optional)

DO: Output function

The intelligent controller offers two to four sets of independent signal contact outputs.

Function setting	See DO Function Setting Table			
Execution mode	NO level	NC level	NO pulse	NC pulse
Pulse time	N/A		1~ 360s (step is 1s)	

Models to be purchased separately

DO function

Type	For use with	Part no. Article no.
4DO output	IZM67/69	IZM6-DO CAM-50047

Notes: Cannot be mounted separately and need to be purchased together with the basic device.

Ethernet communication module

Models to be purchased separately

	For use with	Part no. Article no.
Ethernet communication module	IZM67/69	IZM6-ECAM CAM-50059

Relay module

Models to be purchased separately

	For use with	Part no. Article no.
Relay module	IZM67/69	IZM6-ST201 CAM-50062

IZM6 Series Air Circuit Breakers

Intelligent Controller

DO function setting table

General purpose	Alarm	Fault trip	Self-diagnosis alarm	Instantaneous fault
Ground / residual current fault	Overload pre-alarming	Overload fault	Short delay fault	Under voltage fault
Over voltage fault	Ground alarm	Current imbalance fault	Neutral line fault	Demand fault
Reverse power fault	Voltage imbalance fault	Under frequency fault	Over frequency fault	Phase sequence fault
MCR fault	Short circuit interlocking	Closing	Opening	Demand out of limit
Phase A demand fault	Phase B demand fault	Phase C demand fault	Neutral-phase demand fault	

Notes: General purpose means that this input/output is not used in the controller itself and can be operated by the host computer in the Communication group.

Zone selective interlocking

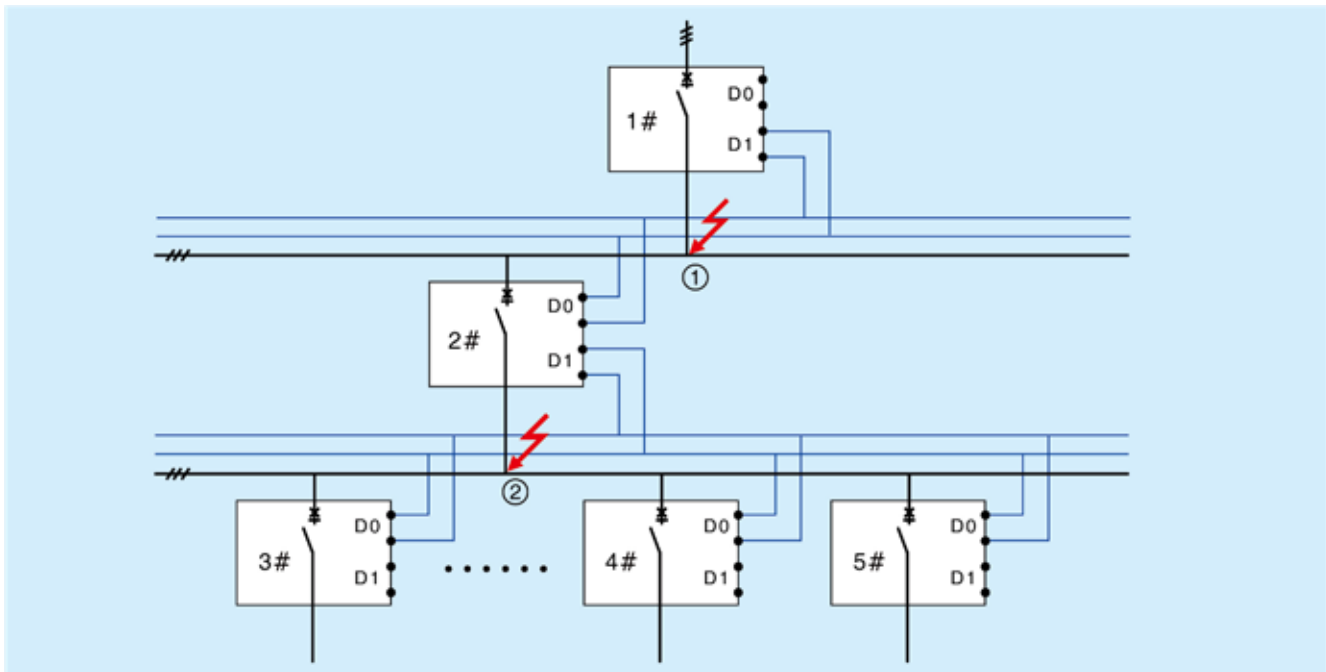
In the same power circuit, zone selective interlocking can be achieved between two or more upstream and downstream circuit breakers. Zone selective interlocking includes short-circuit interlocking and ground interlocking.

1. Interlock function description

- When a short circuit or ground fault occurs at the outgoing side of the downstream circuit breaker (#2~#4) - such as Position ②, the downstream circuit breaker will instantaneously trip and send a zone interlocking signal to the upstream circuit breaker; The upstream circuit breaker (#1) receives the zone interlocking trip signal and delays according to the short circuit or ground protection setting. If the fault current is eliminated during the delay time of the upstream circuit breaker, the protection will return and the upstream circuit breaker will not act; if the fault current is not eliminated after the tripping of the downstream circuit breaker, the upstream circuit breaker will act according to the short-circuit or ground protection setting to switch off the faulty line.
- When a short circuit or ground fault occurs between the upstream circuit breaker (#1) and downstream circuit breaker (#2~#5) -such as Position ①, the upstream circuit breaker will not receive the zone interlocking signal and thus trip instantaneously to quickly cut off the faulty circuit.

2. To set up the I/O ports of the circuit breaker, follow below requirements:

- At least one DI of the upstream circuit breaker is set as zone interlocking detection;
- At least one DO of the downstream circuit breaker is set as zone interlocking signal output



Models to be purchased separately

ZSI function

Type	For use with	Part no. Article no.
ZSI 3DO 1DI	IZM67/69	IZM6-ZSI CAM-50048

Notes: Cannot be mounted separately and need to be purchased together with the basic device.

Optional ZSI function relay output default settings

	Contact 1	Contact 2	Contact 3	Contact 4
ZSI	Overload fault output	Overload trip output	ZSI OUT	ZSI IN

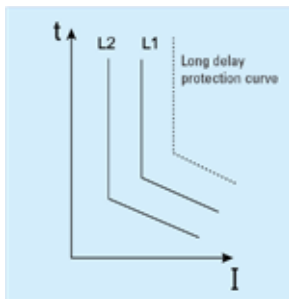
Residual current protection (this function can be extended to PXR6.1P only)

Suitable for protection against residual current faults due to equipment insulation damage or caused by human contact with exposed conductive parts. The residual current action value (I_f) is not subject to the rated current of the circuit breaker. Its signal is taken from an leakage current sensor, with high sampling accuracy and good sensitivity, suitable for small ground current protection.

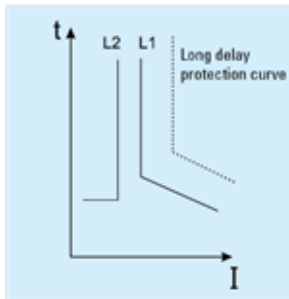
Setting current I_{Δ} (A)	0.5-30A+OFF (step is 0.1A)
Action time T_{Δ} (s)	Instantaneous, 0.06, 0.08, 0.17, 0.25, 0.33, 0.42, 0.5, 0.58, 0.67, 0.75, 0.83
Time accuracy	$\pm 10\%$; inherence: 40ms
Execution mode	Trip / OFF

Notes: The residual current protection cannot be performed together with ground protection function

Current mode action characteristics

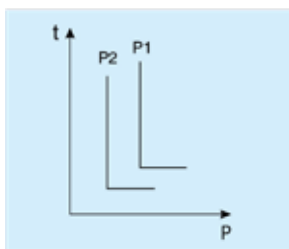


Method 1

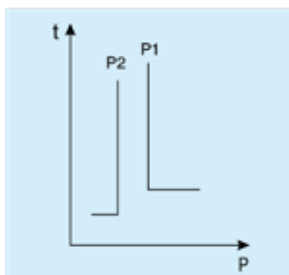


Method 2

Current mode action characteristics



Method 1



Method 2

Load monitoring (optional function) ¹⁾

1. Execution mode

It is used to monitor less important downstream loads to ensure power supply to the main system. Load monitoring can be used for pre-alarming and controlling branch loads. Two methods are available for action, based on power or current:

Method 1: Independent controlling of two-way loads. When the operating parameter exceeds the set point, the corresponding load monitoring DO delay will act (relevant DO function needs to be set) to control and break the two branch loads, to ensure the power supply to the main system.

Method 2: Generally used to control the loads in the same branch. When the operating parameter exceeds the start value, the Load Monitoring 1 DO delay time will act (pulse mode or level mode for action type) to cut off the branch load; if the operating parameter is lower than the return value after breaking, and at the end of the set delay time, the Load Monitoring 1 DO will return and the Load Monitoring 2 DO will act (by level mode or pulse mode), to switch on the disconnected load and restore the power supply to the system.

2. Current-mode action characteristics:

Two methods are available using current as the operating parameter, with action characteristics shown in the figure below. The action inverse time characteristics, overload, curve speed and action values are independently set. In the case of Current Mode 2, the start value L1 must not be less than L2, and the load recovery delay time is fixed time.

3. Active power mode action characteristics

Two methods are available using the system active power as the operating parameter, with action characteristics shown in the figure below. The action and return delay time are both fixed values. In the case of Power Mode 2, the start value L1 must not be less than L2.

Parameter	Setting range	Setting step	Notes	
Load monitoring method	1. Current mode 1	-		
Unload I action set point	Current mode 1/2	0.2-1.0 I_n	I_n = Overload long delay action set point;	
	Power mode 1/2	200-1000kW		
Unload I action delay time	Current mode 1/2	20-80% T_n	T_n = Overload long delay action time	
	Power mode 1/2	10-3600s		
Unload II action set point	Current mode 1	0.2-1.0 I_n		
	Current mode 2	0.2 I_n - Unload 1		
	Power mode 1	200-1000kW		
	Power mode 2	200-Unload I		
Unload II action set point	Current mode 1	20-80% T_n		
	Current mode 2	10-600s		
	Power mode 1/2	10-3600s		
Protection alarm DO output	Set one DO of the signal unit to Load Monitoring 1 and one to Load Monitoring 2			

Models to be purchase separately

Type	For use with	Part no. Article no.
Load monitoring	IZM67/69	IZM6-LMT CAM-50049

Notes: Cannot be mounted separately and need to be purchased together with the basic device.

Notes: ¹⁾ The 4DO output module function must be added if the load monitoring function is purchased. See Page 23.

IZM6 Series Air Circuit Breakers

Intelligent Controller

Communication

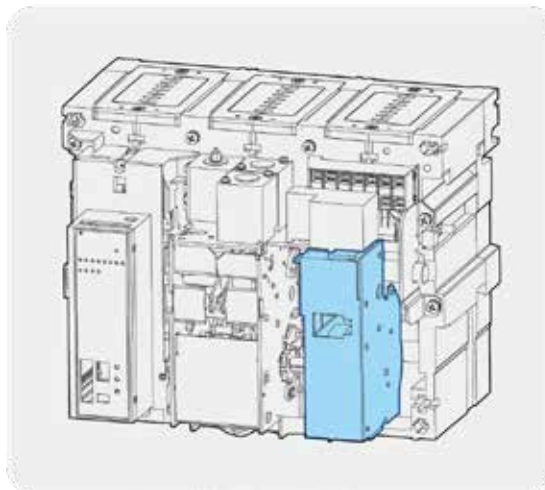
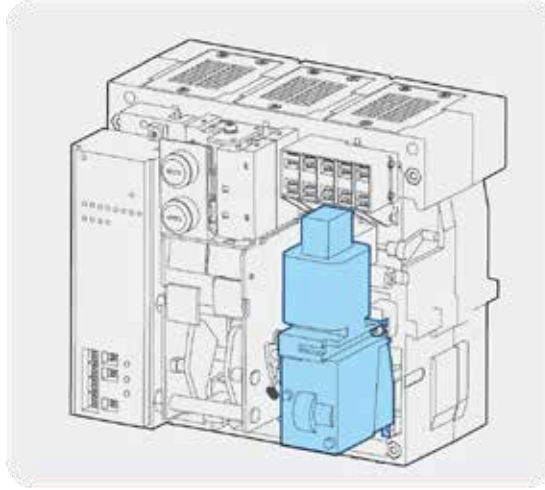
Four remote functions – including remote measurement, remote signaling, remote adjustment and remote control – can be achieved through a communication-type intelligent controller, to enable real-time monitoring of circuit breaker operations. Take the Communication Network Diagram as an example, through which on-site monitoring and ultra-remote monitoring can be implemented, to get real-time picture of the circuit breaker's operating status and to control it accordingly.

The specific system configuration requirements and communication interface parameters are shown in the following table:

Applicable controller	Controller with optional communication function	
Communication method	RS485 (optical isolation)	
Communication medium	Shielded twisted pair	
Communication distance	1200 m	
Communication protocol	Supplied as standard	Modbus-RTU
Communication convention	PXR Series Intelligent Controller Modbus Communication Protocol V3.0	
Transmission speed (bit/s)	PXR 4.1: 9.6K, 19.2K PXR 6.1: 9.6K, 19.2K, 38.4K, 115.2K	
Communication	1~255 (configurable)	

Motor operator

The circuit breaker offers motor charging and automatic recharging functions (manual charging is also available for the circuit breaker).



Rated control voltage U_s (V)	AC230	AC400	DC110	DC220
Model code	M1	M2	M3	M4
Actuating voltage	$(0.85\sim 1.1) U_s$	$(0.85\sim 1.1) U_s$	$(0.85\sim 1.1) U_s$	$(0.85\sim 1.1) U_s$
Power loss	2500A frame	150VA	150W	150W
	4000A frame	150VA	150W	150W
	6300A frame	180VA	180VA	180W
Charging time (s)	5s	5s	5s	5s

Models to be purchased separately

Rated control voltage U_s (V)	For use with	Part no. Article no.	For use with	Part no. Article no.
AC230/DC220	IZM67	IZM6-M-230AC/220DC CAM-50001	IZM69	IZM6-M-220AC/220DC-2 CAM-50164
400VAC	IZM67	IZM6-M-400AC CAM-50002	IZM69	IZM6-M-380AC-2 CAM-50165
DC110	IZM67	IZM6-M-110AC/110DC* CAM-50003	IZM69	IZM6-M-110AC/110DC-2 CAM-50163

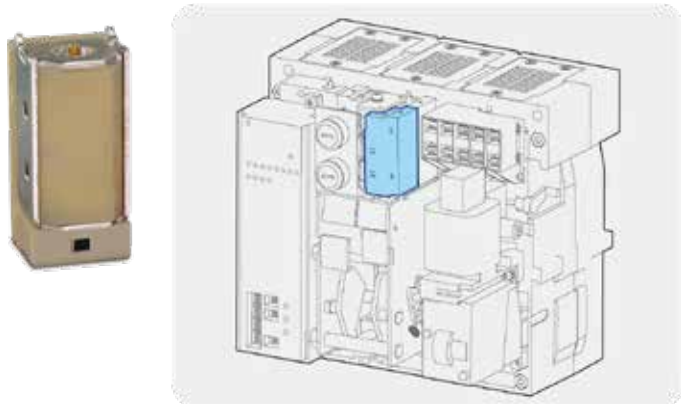
Notes: *Upgraded in May 2022 can also be applied to the AC110V.

IZM6 Series Air Circuit Breakers

Accessories

Closing releases

After charging, the closing coil enables the energy stored in the operating mechanism to release instantaneously, allowing the circuit breaker to close quickly.



Models to be purchased separately

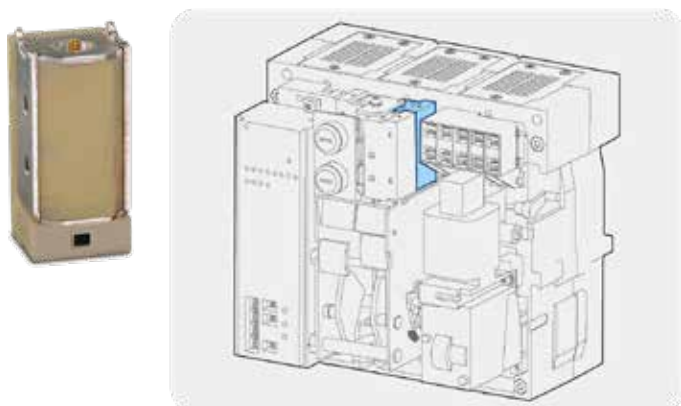
Rated control voltage U_s (V)	For use with	Part no. Article no.
AC230/DC220	IZM67/69	IZM6-SR-230AC/220DC CAM-50005
400VAC	IZM67/69	IZM6-SR-400AC CAM-50006
AC110/DC110	IZM67/69	IZM6-SR-110AC/110DC CAM-50007

Power loss table of the closing releases

Insulation voltage (U_i)	Rated control voltage U_s (V)	Actuating voltage	Pickup transient current	Pickup transient power
400V	AC230	$(0.85\sim 1.1) U_s$	2.8A	575VA
	AC400	$(0.85\sim 1.1) U_s$	2.1A	780VA
	AC110	$(0.85\sim 1.1) U_s$	5.1A	495VA
	DC110	$(0.85\sim 1.1) U_s$	5.2A	550W
	DC220	$(0.85\sim 1.1) U_s$	2.9A	630W

Shunt releases

Enables the circuit breaker to open remotely.



Models to be purchased separately

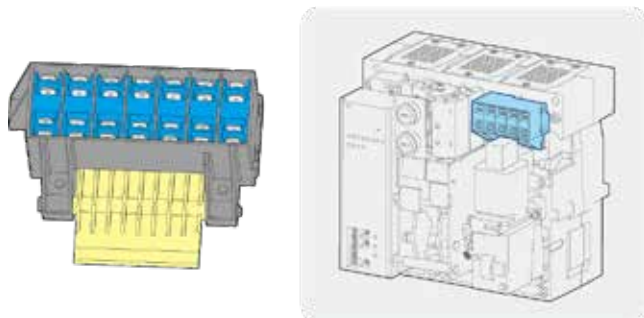
Rated control voltage U_s (V)	For use with	Part no. Article no.
AC230/DC220	IZM67/69	IZM6-ST-230AC/220DC CAM-50050
400VAC	IZM67/69	IZM6-ST-400AC CAM-50051
AC110/DC110	IZM67/69	IZM6-ST-110AC/110DC CAM-50052

Power loss table of the shunt releases

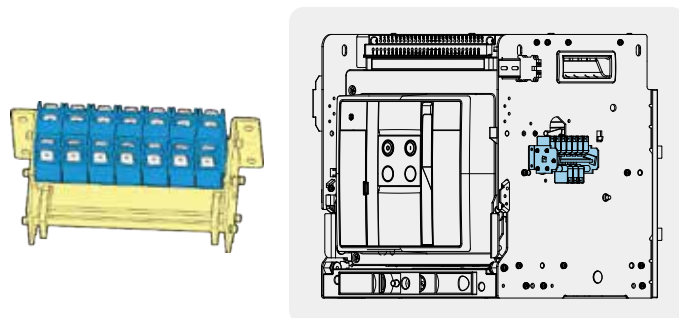
Insulation voltage (U_i)	Rated control voltage U_s (V)	Actuating voltage	Pickup transient current	Pickup transient power
400V	AC230	$(0.7\sim 1.1) U_s$	2.8A	575VA
	AC400	$(0.7\sim 1.1) U_s$	2.1A	780VA
	AC110	$(0.7\sim 1.1) U_s$	5.1A	495VA
	DC110	$(0.7\sim 1.1) U_s$	5.2A	550W
	DC220	$(0.7\sim 1.1) U_s$	2.9A	630W

Auxiliary contacts

Internal auxiliary contact



External auxiliary contact



The internal auxiliary contacts supplied as standard in ABC is 4 ONs and 4 OFFs; when more than 4 ONs 4 OFFs, external auxiliary contacts will be needed, with the maximum number of 10 ONs and 10 OFFs

	Rated operational voltage U_e (V)	Rated control compacity	Conventional thermal current I_{th} (A)
Auxiliary contact	AC400	800VA	16
	AC230		
	DC220	300W	
	DC110		

Type	Code
4 NO / NC	4
6 NO / NC	6
8 NO / NC	8
10 NO / NC	A
12 NO / NC	B
14 NO / NC	C

Notes: Auxiliary contact range for IZM67/69 series air circuit breaker: 4 NO / NC to 14 NO / NC contacts

Overcurrent trip switches (OTS)

Models to be purchased separately

	For use with	Part no. Article no.
Overcurrent trip switches (OTS)	IZM67/69	IZM6-OTS CAM-50058

Notes: Can't be equipped together with remote reset. The OTS cannot be installed separately, and should be purchased with the basic device.

Latch check switch (LCS) contact

Models to be purchased separately

	For use with	Part no. Article no.
LCS contact	IZM67/69	IZM6-LCS CAM-50068

Notes: Cannot be installed separately, and should be purchased with the basic device.

Models to be purchased separately

Withdrawable type:

	For use with	Part no. Article no.	Wiring code
External 2 NO / NC	IZM67/69	IZM6-AS22 CAM-50010	See Wiring diagram
External 4 NO / NC	IZM67/69	IZM6-AS44 CAM-50054	See Wiring diagram
External 6 NO / NC	IZM67/69	IZM6-AS66 CAM-50055	See Wiring diagram
External 8 NO / NC	IZM67/69	IZM6-AS88 CAM-50056	See Wiring diagram
External 10 NO / NC	IZM67/69	IZM6-AS1010 CAM-50057	See Wiring diagram

Notes: External auxiliary contacts cannot be equipped together with mechanical interlocking.

Fixed type:

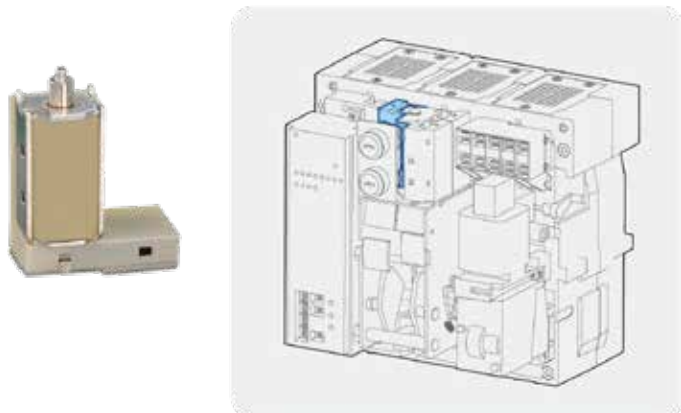
	For use with	Part no. Article no.	Wiring code
External 2 NO / NC	IZM67/69	IZM6-AS22-F CAM-50122	See Wiring diagram
External 4 NO / NC	IZM67/69	IZM6-AS44-F CAM-50123	See Wiring diagram
External 6 NO / NC	IZM67/69	IZM6-AS66-F CAM-50124	See Wiring diagram
External 8 NO / NC	IZM67/69	IZM6-AS88-F CAM-50125	See Wiring diagram
External 10 NO / NC	IZM67/69	IZM6-AS1010-F CAM-50126	See Wiring diagram

Notes: External auxiliary contacts cannot be equipped together with mechanical interlocking.

IZM6 Series Air Circuit Breakers

Accessories

Undervoltage and Novoltage releases



Undervoltage releases

Rated operational voltage U_e (V)		AC230/DC220	AC400
Action type	Type	Code	
	Instantaneous	Q11	Q21
	Delay time 1s	Q14	Q24
	Delay time 3s	Q15	Q25
	Delay time 5s	Q16	Q26
	Delay time 10s	Q17	Q27
Actuating voltage (V)		(0.35-0.7) U_e	
Reliable closing voltage (V)		(0.85-1.1) U_e	
Reliable no-closing voltage (V)		$\leq 0.35 U_e$	
Power loss		15VA	

Models to be purchased separately

Under voltage instantaneous

Rated control voltage U_s (V)	For use with	Part no. Article no.
230VAC/220DC	IZM67/69	IZM6-UVR-230AC* CAM-50015
400VAC	IZM67/69	IZM6-UVR-400AC CAM-50016

Under voltage with time delay function

Rated control voltage U_s (V)	For use with	Delay time	Part no. Article no.
230VAC/220DC	IZM67/69	1s	IZM6-UVR-TD1-230AC* CAM-50017
		3s	IZM6-UVR-TD3-230AC* CAM-50018
		5s	IZM6-UVR-TD5-230AC* CAM-50019
		10s	IZM6-UVR-TD10-230AC* CAM-50020
400VAC	IZM67/69	1s	IZM6-UVR-TD1-400AC CAM-50021
		3s	IZM6-UVR-TD3-400AC CAM-50022
		5s	IZM6-UVR-TD5-400AC CAM-50023
		10s	IZM6-UVR-TD10-400AC CAM-50024

Notes: * Application range: AC230V, DC220V. Undervoltagerelase, Novoltage release, and Operation counter cannot be assembled at the same time.

Novoltage releases

Rated operational voltage U_e (V)		AC230/DC220	AC400
Action type	Type	Code	
	Instantaneous	Q51	Q61
	Delay time 0.3s	Q58	Q68
	Delay time 0.5s	Q59	Q69
	Delay time 0.7s	Q5A	Q6A
	Delay time 1s	Q54	Q64
	Delay time 3s	Q55	Q65
	Delay time 5s	Q56	Q66
Actuating voltage (V)		(0.1-0.35) U_e	
Reliable closing voltage (V)		(0.85-1.1) U_e	
Reliable no-closing voltage (V)		$\leq 0.35 U_e$	
Power loss		3.24VA	6.36VA

Models to be purchased separately

Rated control voltage U_s (V)	For use with	Part no. Article no.
230VAC/220DC	IZM67/69	IZM6-NVR-230AC* CAM-50111
400VAC	IZM67/69	IZM6-NVR-400AC CAM-50092

No voltage with time delay function

Rated control voltage U_s (V)	For use with	Delay time	Part no. Article no.
230VAC/220DC	IZM67/69	0.3s	IZM6-NVR-TD03-230AC* CAM-50112
		0.5s	IZM6-NVR-TD05-230AC* CAM-50113
		0.7s	IZM6-NVR-TD07-230AC* CAM-50114
		1s	IZM6-NVR-TD1-230AC* CAM-50093
		3s	IZM6-NVR-TD3-230AC* CAM-50094
		5s	IZM6-NVR-TD5-230AC* CAM-50095
400VAC	IZM67/69	0.3s	IZM6-NVR-TD03-400AC CAM-50115
		0.5s	IZM6-NVR-TD05-400AC CAM-50116
		0.7s	IZM6-NVR-TD07-400AC CAM-50117
		1s	IZM6-NVR-TD1-400AC CAM-50097
		3s	IZM6-NVR-TD3-400AC CAM-50098
		5s	IZM6-NVR-TD5-400AC CAM-50099

Notes: * Application range: AC230V, DC220V

Lock

OFF position safety lock

The OFF position safety lock can secure the opening button of the circuit breaker in the depressed position.

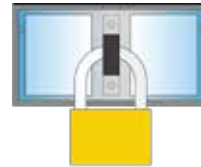
One lock and one key (K1): A circuit breaker is equipped with one lock and one key. The circuit breaker is not allowed to close in the locked state.

Two locks and one key (K2): Two circuit breakers are equipped with two identical locks and one key, and only one circuit breaker is allowed to close.

Three locks and two keys (K3): Three circuit breakers are equipped with three identical locks and two keys, and only two circuit breakers are allowed to close.



ON and OFF position button lock



Models to be purchased separately

	For use with	Part no. Article no.
ON and OFF position button lock	IZM67/69	IZM6-PLPC CAM-50028

Notes: Factory mounting is recommended (free of charge). Please specify in the order on which model's basic device the lock is mounted. Eaton's on-site installation service requires additional charge. Please contact Eaton's sales representative for details prior to ordering.

Models to be purchased separately

Lock type	For use with	Part no. Article no.
One lock / one key	IZM67/69	IZM6-1L1K-A CAM-50069
	IZM67/69	IZM6-1L1K-B CAM-50064
	IZM67/69	IZM6-1L1K-C CAM-50065
Three locks / two keys	IZM67/69	IZM6-3L2K-A CAM-50070
	IZM67/69	IZM6-3L2K-B CAM-50066
	IZM67/69	IZM6-3L2K-C CAM-50067

Notes: Factory mounting is recommended (free of charge). Please specify in the order on which model's basic device the lock is mounted. Eaton's on-site installation service requires additional charge. Please contact Eaton's sales representative for details prior to ordering.

Remote reset

Models to be purchased separately

	For use with	Part no. Article no.
Remote reset	IZM67/69	IZM6-RR230AC CAM-50060

Notes: Remote reset cannot be equipped together with auxiliary contact for trip signal. It cannot be installed separately and needs to be purchased together with the basic device.

IZM6 Series Air Circuit Breakers

Accessories

Mechanical Interlock

		For use with	Part no. Article no.
Mechanical interlock, fixed mounting	Type 2, for 2 Circuit Breakers: A normal power supply (A) and an emergency network supply (B). 1 kit of cables also required in addition.	IZM67,69...F IN67,69...F	IZM6-MIL2C-F CAM-50041
	Type 31, for 3 Circuit Breakers: Two normal power supplies (A, C) and an emergency network supply (B). When B in Off, A and C can be switched on. B can be switched on only when A and C are in Off. Two kits of cables required in addition.	IZM67,69...F IN67,69...F	IZM6-MIL31C-F CAM-50042
	Type 32, for 3 Circuit Breakers: Two normal incoming units (A, C) and one coupling (B). Any one or two circuitbreakers can be closed at the same time. Three kits of cables are required in addition.	IZM67,69...F IN67,69...F	IZM6-MIL32C-F CAM-50043
Mechanical interlock, drawout mounting	Type 2, for 2 Circuit Breakers: A normal power supply (A) and an emergency network supply (B). 1 kit of cables also required in addition.	IZM67,69...W IN67,69...W	IZM6-MIL2C-W CAM-50044
	Type 31, for 3 Circuit Breakers: Two normal power supplies (A, C) and an emergency network supply (B). When B in Off, A and C can be switched on. B can be switched on only when A and C are in Off. Two kits of cables required in addition.	IZM67,69...W IN67,69...W	IZM6-MIL31C-W CAM-50045
	Type 32, for 3 Circuit Breakers: Two normal incoming units (A, C) and one coupling (B). Any one or two circuitbreakers can be closed at the same time. Three kits of cables are required in addition.	IZM67,69...W IN67,69...W	IZM6-MIL32C-W CAM-50046

Notes: Cable length: 2000mm. External auxiliary contacts and mechanical interlock cannot be equipped at the same time.

2-line interlocking logic

A	B
0	0
1	0
0	1

31 type interlocking logic

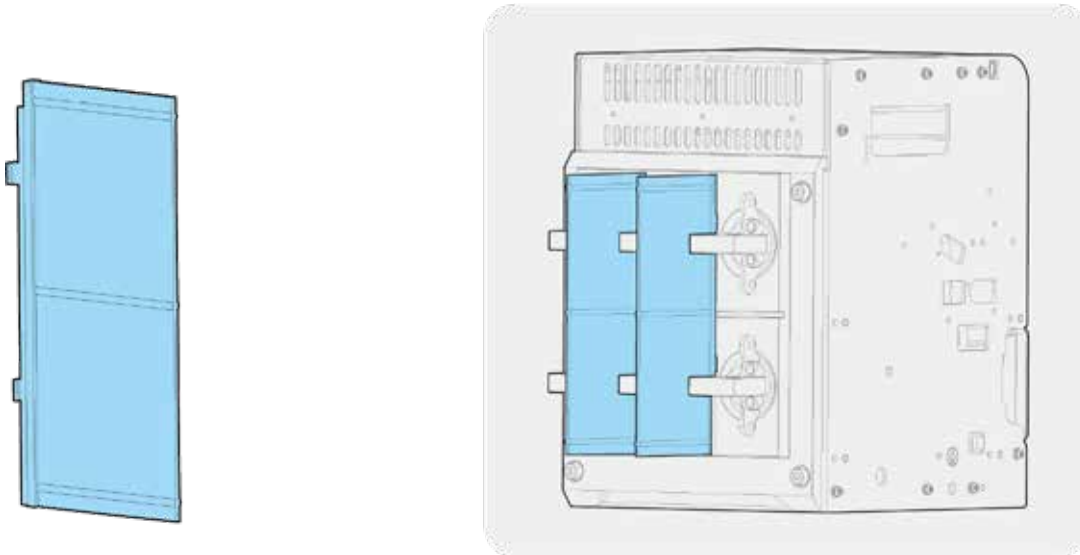
A	B	C
0	0	0
1	0	0
1	0	1
0	0	1
0	1	0

32 type interlocking logic

A	B	C
0	0	0
1	0	0
0	1	0
0	0	1
1	1	0
0	1	1
1	0	1

Inter-phase partition

The inter-phase partition is mounted vertically between the wiring boards in the fixed section of the drawout circuit breaker, to increase the insulation strength of the busbar connection and prevent the arc from spreading to the inside of the circuit breaker.



Models to be purchased separately

Withdrawable type:

	For use with	Part no. Article no.
Interphase partition – 3-pole	IZM67/69	IZM6-IB-3 CAM-50029

Fixed type:

	For use with	Part no. Article no.
Interphase partition – 3-pole	IZM67/69	IZM6-IB-3-F CAM-50118

Tester

Models to be purchased separately

	For use with	Part no. Article no.
Tester	IZM67/69	IZM6-TEST-KIT CAM-50102

Operation counter

Models to be purchased separately

	For use with	Part no. Article no.
Operation counter	IZM67/69	IZM6-OC CAM-50061

Notes: Cannot be mounted separately and need to be purchased together with the basic device. Undervoltagerelase, Novoltage release, and Operation counter cannot be assembled at the same time.

Collapsible hand lever

Models to be purchased separately

	For use with	Part no. Article no.
Collapsible hand lever	IZM67/69	IZM6-LT CAM-50101

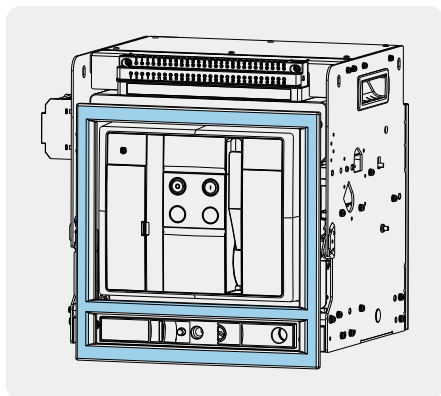
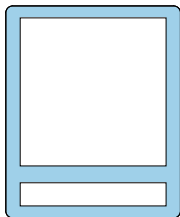
Notes: Hand lever is included in D/O breaker.

IZM6 Series Air Circuit Breakers

Accessories

Door escutcheon

The door escutcheon is mounted on the door, and features a protection level up to IP40. The circuit breaker offers an IP20 protection level when mounted separately. Corresponding door escutcheons is available for both fixed and drawout circuit breakers.

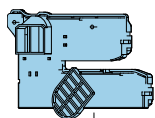


Models to be purchased separately

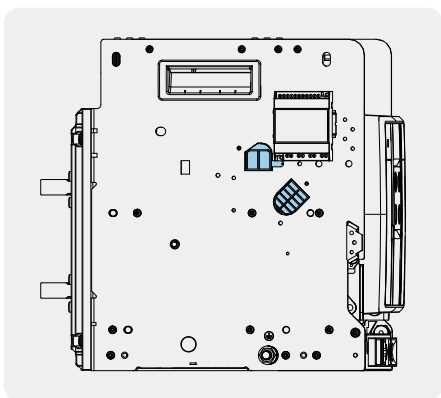
	For use with	Part no. Article no.
Door escutcheon for drawout circuit breaker	IZM67/69	IZM6-DEG-W CAM-50031
Door escutcheon for fixed circuit breaker	IZM67/69	IZM6-DEG-F CAM-50032

Cell switch

Three sets of contacts are available to indicate the current position of the circuit breaker (Connected, Test, Disconnected). When the circuit breaker is in a certain position, the corresponding contact will be switched on.



Cell switch mounted inside the switch



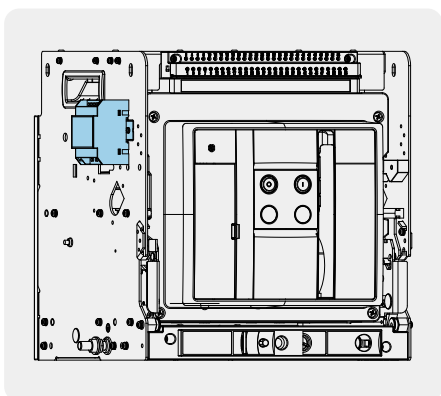
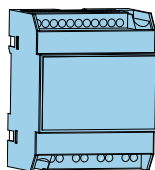
Models to be purchased separately

	For use with	Part no. Article no.
Cell switch	IZM67/69	IZM6-CS CAM-50033

Power Module

Input power: 65-500V AC or 80-700V DC

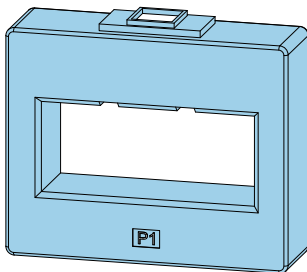
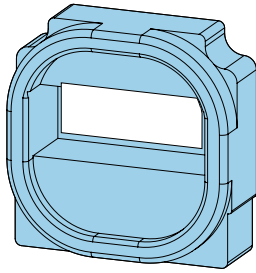
An auxiliary power supply must be equipped when the ground protection, communication, or thermal memory function is used or when the circuit breaker is required to maintain input/output signals in the Open state.



Models to be purchased separately

	For use with	Part no. Article no.
External power supply adapter	IZM67/69	IZM6-EASY400 CAM-50034

Current sensor for neutral conductor

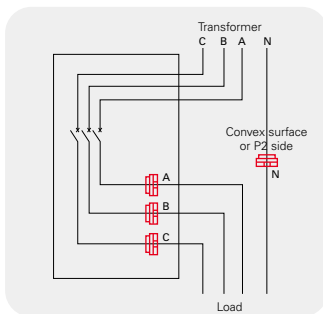


The TN-S power distribution system uses a three-pole circuit breaker, which requires a current sensor for neutral conductor to be equipped with.

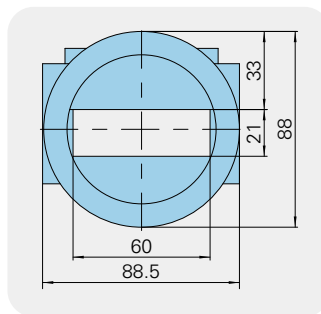
The ground-current N-phase transformer only measures the N-phase current for ground protection judgement, with its N-phase transformer mounting direction not subject to the wiring method.

During mounting, be cautious of the following:

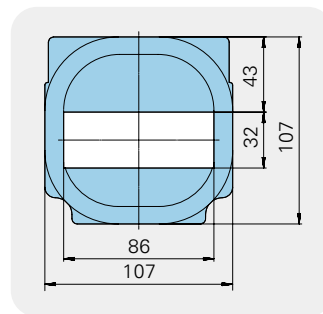
1. Twisted-pair wires are available on the current sensor for neutral conductor, with Code No. 23 and 24 on them to connect corresponding secondary terminals. Simply follow the code numbers on the conductors to connect to the secondary terminals.
2. The mounting direction of the current sensor for neutral conductor is subject to the wiring method of the circuit breaker:
 For the circuit breaker with upper incoming line, the convex surface of the current sensor for neutral conductor faces the transformer side;
 For the circuit breaker with lower incoming line, the plane surface of the current sensor for neutral conductor faces the transformer side;
 When the Type IV current sensor for neutral conductor is used:
 For the circuit breaker with upper incoming line, the P2 side of the current sensor for neutral conductor faces the transformer side;
 For the circuit breaker with lower incoming line, the P1 side of the current sensor for neutral conductor faces the transformer side;
3. Select the transformer model based on the width of N-phase busbar



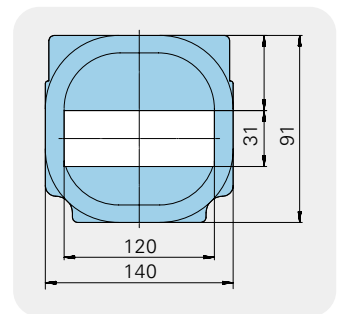
Upper entry line



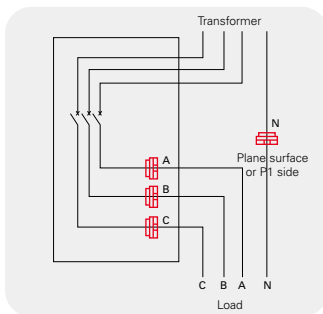
Type I



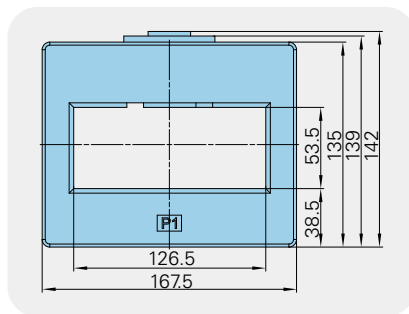
Type II



Type III



lower entry line



Type IV

Models to be purchased separately

	For use with	Part no. Article no.
Current sensor for neutral conductor	IZM67/69	IZM6-CT-I CAM-50035
	IZM67/69	IZM6-CT-II CAM-50036
	IZM67/69	IZM6-CT-III CAM-50037
	IZM67/69	IZM6-CT-IV CAM-50063

Notes: On-site installation, but can not be ordered separately, need to be ordered together with the circuit-breaker.

IZM6 Series Air Circuit Breakers

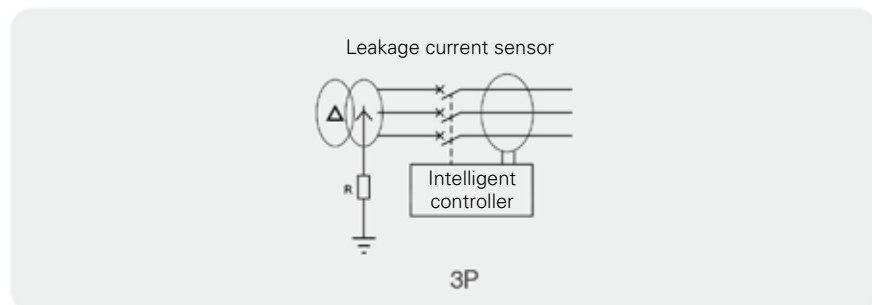
Accessories

Leakage current sensor

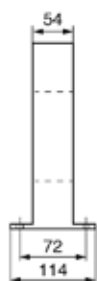
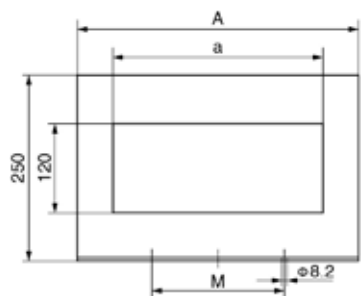
An Leakage current sensor is needed when residual current protection is selected, and the controller does not have the ground protection function.

Twisted-pair wires are available on the transformer, with Code No. 6 and 7 to connect corresponding secondary terminals. Simply follow the code numbers on the conductors to connect the secondary terminals.

See below diagram for residual current protection principle.



Dimensions (mm)



	A	M	a
Type I	380	250	285
Type II	465	250	370
Type III	595	350	500

Models to be purchased separately

	For use with	Part no. Article no.
Residual current transformer	Type P trip unit	IZM6-CL-I CAM-50038
	Type P trip unit	IZM6-CL-II CAM-50039
	Type P trip unit	IZM6-CL-III CAM-50040

Notes: On-site installation, but can not be ordered separately, need to be ordered together with the circuit-breaker.

Voltage module

Models to be purchased separately

	For use with	Part no. Article no.
Voltage module	IZM67/69	IZM6-PTM CAM-50071

Power Loss (with ambient temperature of +40°C)

Power loss is the total power consumption measured when the frame rating current I_n passes through the circuit breaker.

Model	Power loss (W)	
	Fixed type	Drawout type
IZM67 4000A frame	486.7	856.8
IZM69 6300A frame	787	1145

Temperature Derating

When the working ambient temperature is higher than +40°C, the continuous current carrying capacity can be corrected with reference to the following table:

Model	Rated current (A)	+40°C	+45°C	+50°C	+55°C	+60°C	+65°C	+70°C
IZM67 4000A frame	2000-2500	1	1	1	1	1	1	1
	3200	1	1	1	0.95	0.92	0.89	0.85
	4000	1	0.95	0.92	0.89	0.85	0.82	0.8
IZM69 6300A frame	4000-5000	1	1	1	1	1	0.95	0.9
	6300	1	1	0.98	0.93	0.89	0.85	0.82

When the altitude is greater than or equal to 2000m, the electrical performance of the circuit breaker can be corrected with reference to the following table:

Altitude (m)		2000	3000	4000	4500	5000
Power frequency withstand voltage (V) 5s		5000	4500	4000	3500	3150
Insulation voltage (V)		1250	1250	1250	1250	1250
Max. operating voltage (V)	IZM67	690	690	690	690	690
		1140	1140	1140	1140	1140
Breaking capacity correction		1	0.83	0.77	0.7	0.63
Operating current correction	IZM67 4000A frame	1	0.93	0.88	0.85	0.82
	IZM69 6300A frame	1	0.98	0.93	0.9	0.87

The derating correction factor is only for the maximum current in the frame

Recommended copper bar specification

Rated current (frame level) I_{nm} (A)	Rated current I_n (A)	Recommended copper bar specification		
		Number		
		Horizontal outgoing	Vertical outgoing	Dimensions (mm × mm)
IZM67 4000A frame	2000	3	2	100 × 5
	2500	2	2	100 × 10
	3200	3	3	100 × 10
	4000	5	4	100 × 10
IZM69 6300A frame	4000	4	/	100 × 10
	5000	6	/	100 × 10
	6300	10	/	100 × 10

The copper bar specifications used in the table are when the circuit breaker is at the ambient temperature of up to 40 °C and installed in an open area, in accordance with the conventional thermal conditions in GB14048.2.

IZM6 Series Air Circuit Breakers

Power Loss, Temperature Derating and Copper Bar Specification



The intelligent controller is set as follows, if without special requirements from users

Overload long delay time protection	I_r	I_n
	t_r	60s
Short circuit short delay time protection	I_{sd}	$3I_r$
		0.1s
Short circuit instantaneous protection	I_i	$5 I_n$
Ground fault protection	I_g	$0.8 I_n$ or 1200A (take the minimum value)
Current imbalance protection	OFF	
Neutral-pole protection	100% I_r	
Voltage imbalance protection	OFF	
Under voltage protection	OFF	
Over voltage protection	OFF	
Demand protection	OFF	
Phase sequence protection	OFF	
Frequency protection	OFF	
MCR peak	IZM67 4000A frame	90kA

Relay output default settings (optional)

	Contact 1	Contact 2	Contact 3	Contact 4
PXR Trip Unit	Over load fault output	Fault trip output	Remote control opening	Remote control closing

Terminal numbers are described as follows:

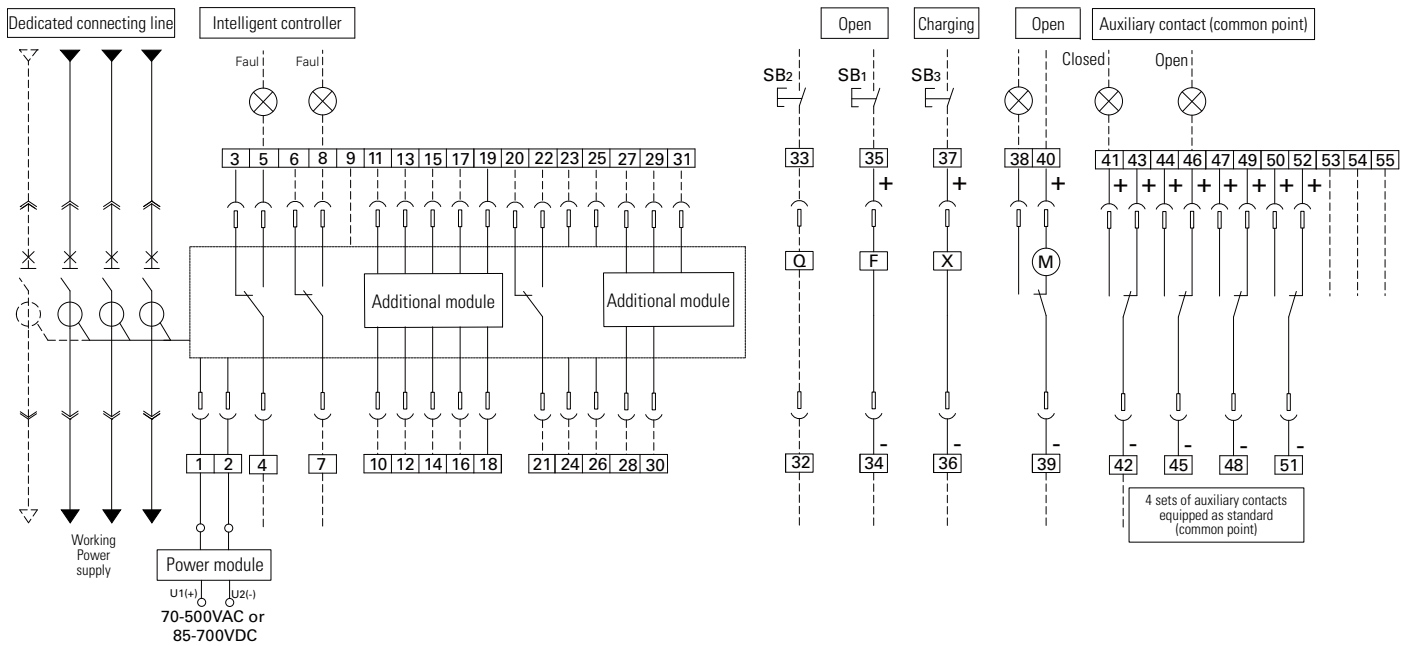
1# 2#	24VDC working power supply input
3# 4# 5#	Overcurrent trip switches (OTS) output
6# 7# 8#	Overcurrent trip switches 2 (OTS) output (added function)
9#	Reserved
10# 11#	First contact output wiring terminal (added function)
12# 13#	Second contact output wiring terminal (added function)
14# 15#	Third contact output wiring terminal (added function)
16# 17#	Fourth contact output wiring terminal (added function)
18# 19#	Remote reset wiring terminal (added function)
20# 21# 22#	LCS wiring terminal (added function)
23# 24#	External transformer terminal (added function)
25# 26#	Communication wiring terminal (added function)

27#	Phase A wiring terminal (input voltage ≤ 230V) (added function)
28#	Phase B wiring terminal (input voltage ≤ 230V) (added function)
29#	Phase C wiring terminal (input voltage ≤ 230V) (added function)
30#	N-phase wiring terminal (added function)
31#	PE-phase wiring terminal
32# 33#	Under voltage coil wiring terminal (added function)
34# 35#	Shunt coil wiring terminal (added function)
36# 37#	Closing coil
38# 39# 40#	Motor operator mechanism wiring terminal
41#-52#	Auxiliary contact wiring terminal
53# 54# 55#	Reserved

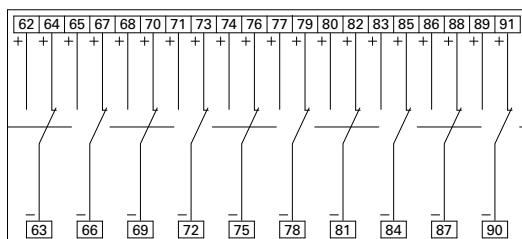
Notes:

- (1) Position contact terminal #56-#61 do not pass through the secondary terminal
- (2) Buttons and indicator lights are provided by users themselves
- (3) The secondary wiring of the power supply module is shown in the diagram - the external power supply is input from U1 (+) and U2 (-), and the two output terminals of the power supply module are connected separately to corresponding secondary wiring terminals #1 (+) and #2 (-)
- (4) The contact output functions are optional. The output functions can be selected with reference to "DO Function Setting Table" on Page 24; for default settings, refer to "Contact Default Setting" on Page 38.
- (5) The above circuit diagrams are the ones when the circuit breaker is in the open position.
- (6) Voltage protection of Phase A, B, C and N is connected to terminals with the maximum voltage of 400V; if above 400V, a voltage module is required
- (7) This wiring diagram includes all the functions. Optional functions are available only after selected and equipped by users

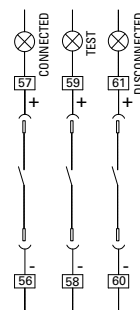
IZM67,IZM69 electrical wiring diagram



External auxiliary contact terminal number



Cell Switch electrical wiring diagram



IZM6 Series Air Circuit Breakers

Wiring Diagram

Terminal numbers are described as follows:

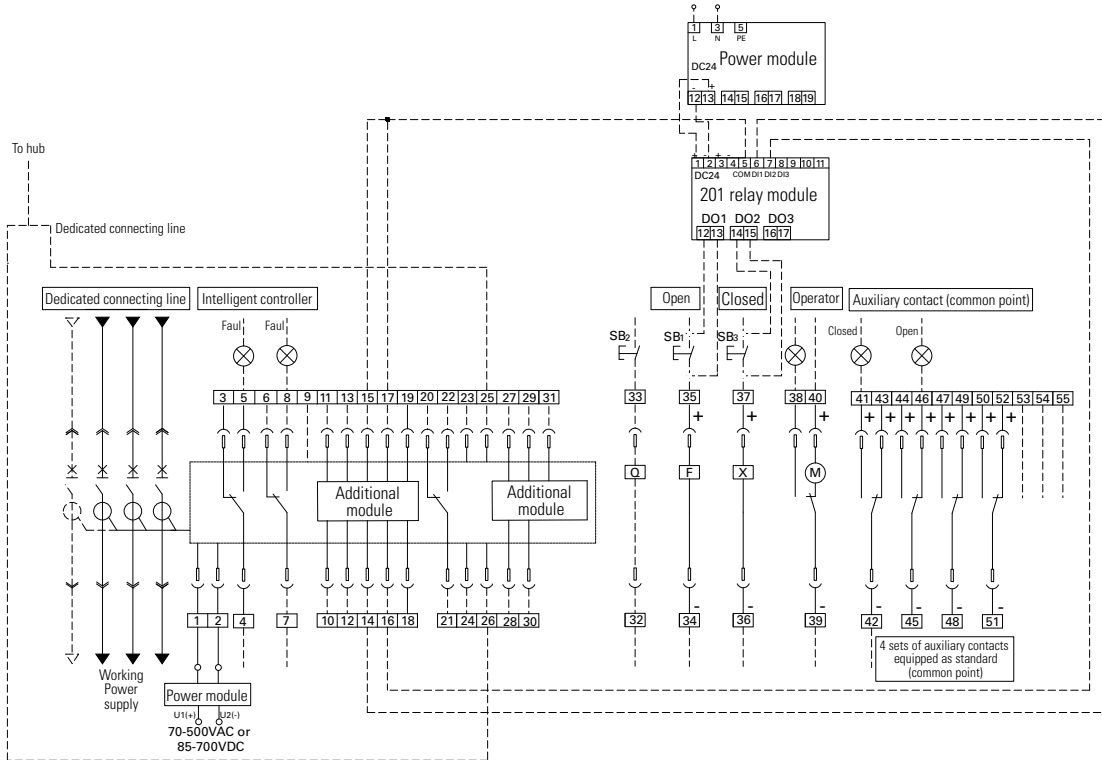
1# 2#	24VDC working power supply input
3# 4# 5#	Overcurrent trip switches (OTS) output
6# 7# 8#	Overcurrent trip switches 2 (OTS) output (added function)
9#	Reserved
10# 11#	First contact output wiring terminal (added function)
12# 13#	Second contact output wiring terminal (added function)
14# 15#	Third contact output wiring terminal (added function)
16# 17#	Fourth contact output wiring terminal (added function)
18# 19#	Remote reset wiring terminal (added function)
20# 21# 22#	LCS wiring terminal (added function)
23# 24#	External transformer terminal (added function)
25# 26#	Communication wiring terminal (added function)

27#	Phase A wiring terminal (input voltage ≤ 230V) (added function)
28#	Phase B wiring terminal (input voltage ≤ 230V) (added function)
29#	Phase C wiring terminal (input voltage ≤ 230V) (added function)
30#	N-phase wiring terminal (added function)
31#	PE-phase wiring terminal
32# 33#	Under voltage coil wiring terminal (added function)
34# 35#	Shunt coil wiring terminal (added function)
36# 37#	Closing coil
38# 39# 40#	Motor operator mechanism wiring terminal
41#-52#	Auxiliary contact wiring terminal
53# 54# 55#	Reserved

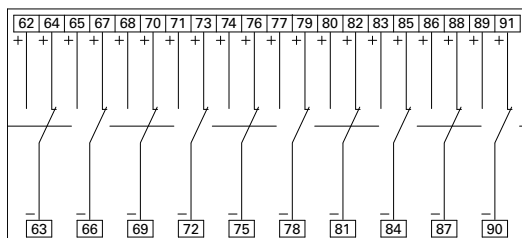
Notes:

- (1) Position contact terminal #56-#61 do not pass through the secondary terminal
- (2) Buttons and indicator lights are provided by users themselves
- (3) The secondary wiring of the power supply module is shown in the diagram - the external power supply is input from U1 (+) and U2 (-), and the two output terminals of the power supply module are connected separately to corresponding secondary wiring terminals #1 (+) and #2 (-)
- (4) The contact output functions are optional. The output functions can be selected with reference to "DO Function Setting Table" on Page 24; for default settings, refer to "Contact Default Setting" on Page 38.
- (5) The above circuit diagrams are the ones when the circuit breaker is in the open position.
- (6) Voltage protection of Phase A, B, C and N is connected to terminals with the maximum voltage of 400V; if above 400V, a voltage module is required
- (7) This wiring diagram includes all the functions. Optional functions are available only after selected and equipped by users

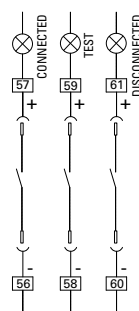
IZM67,IZM69 electrical wiring diagram (with communication function)



External auxiliary contact terminal number

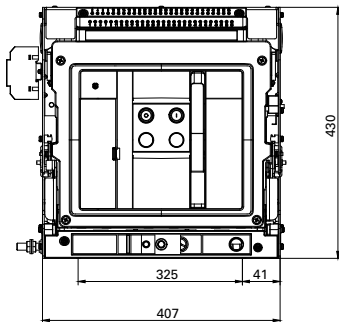


Cell Switch electrical wiring diagram

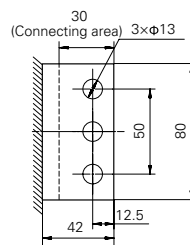
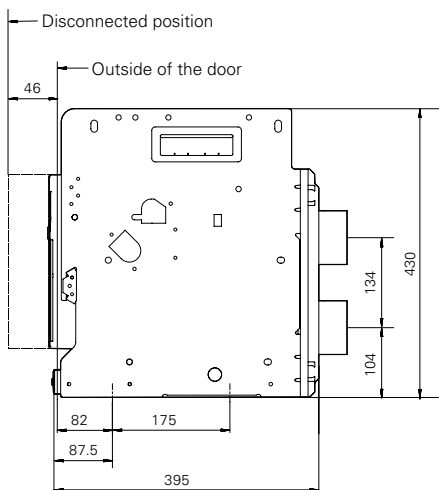
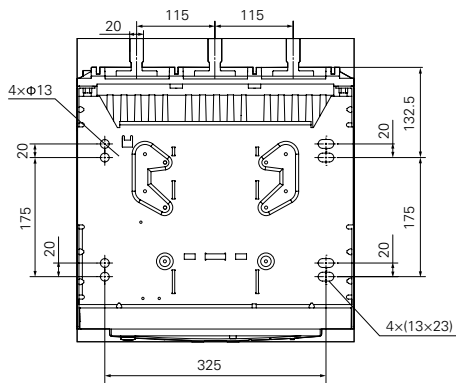


Drawout type (IZM67 2000-3200A)

Front view



Vertical wiring



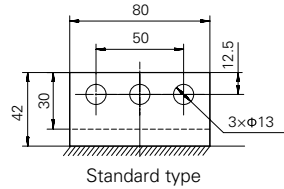
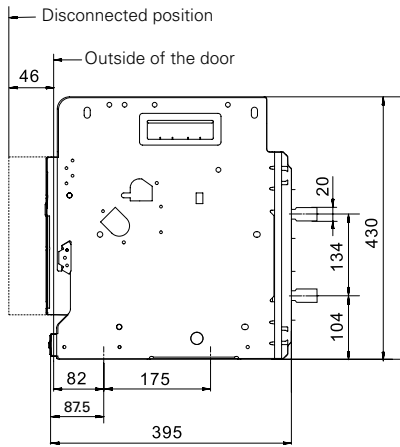
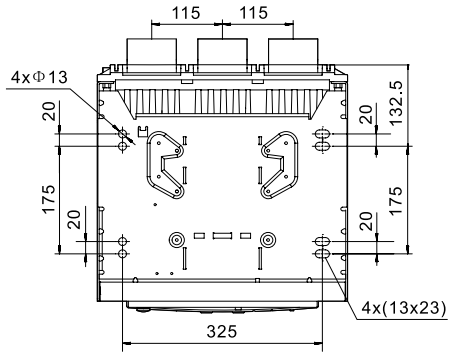
Standard type

IZM6 Series Air Circuit Breakers

Outline Dimensions

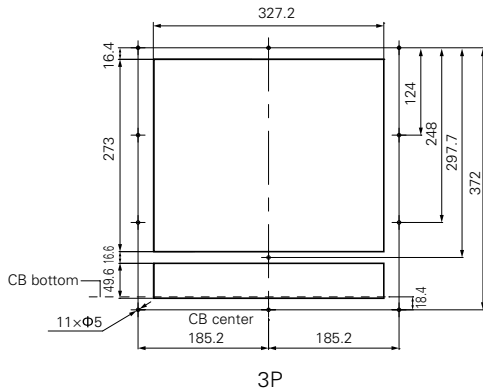
Drawout type (IZM67 2000-3200A)

Horizontal wiring



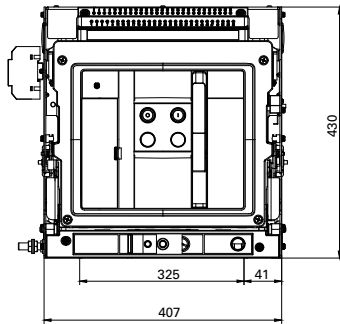
The shaded part is the lap surface of the busbar

Door escutcheon cutout

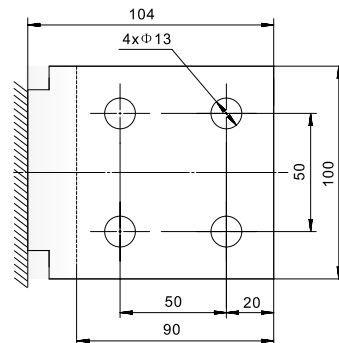
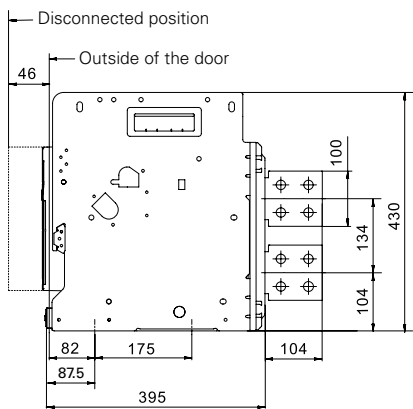
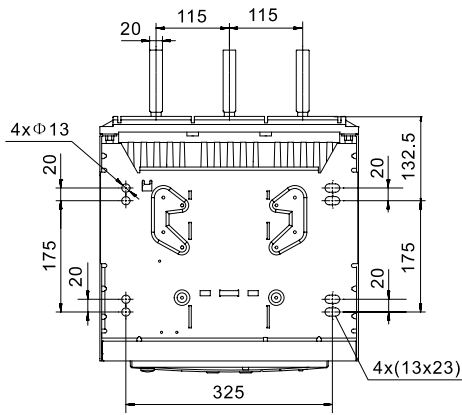


Drawout type (IZM67 4000A)

Front view



Vertical wiring



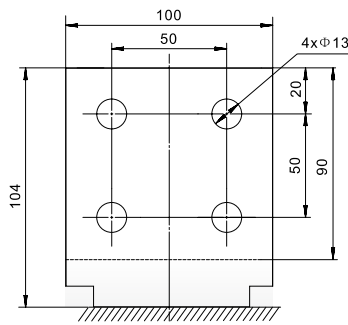
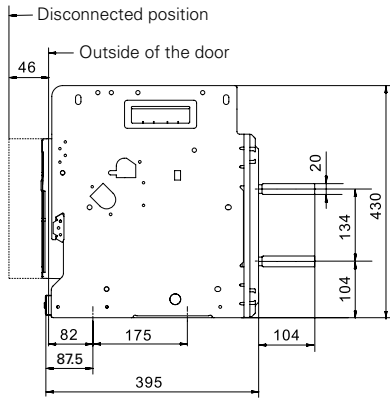
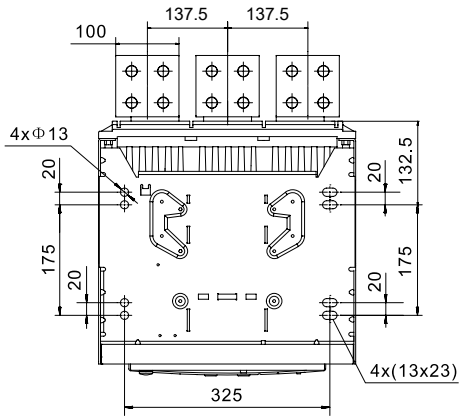
The shaded part is the lap surface of the busbar

IZM6 Series Air Circuit Breakers

Outline Dimensions

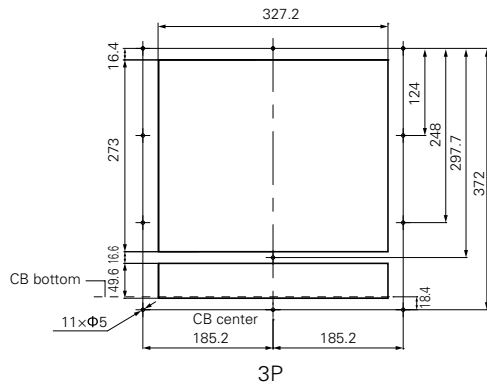
Drawout type (IZM67 4000A)

Horizontal wiring



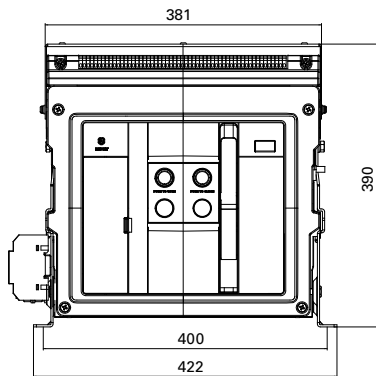
The shaded part is the lap surface of the busbar

Door escutcheon cutout

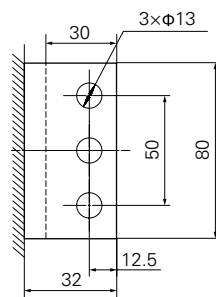
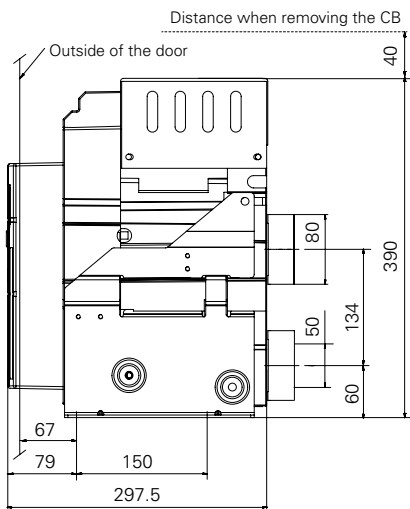
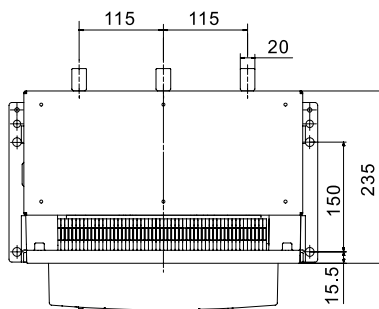


Fixed type (IZM67 2000-3200A)

Front view



Vertical wiring



Standard type

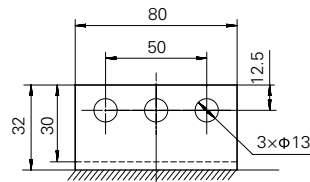
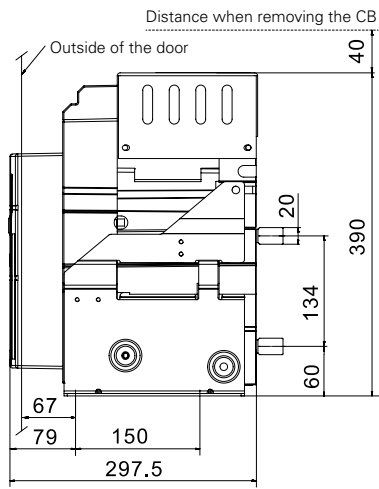
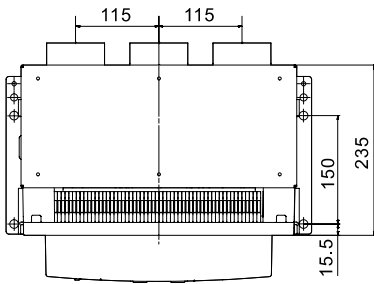
The shaded part is the lap surface of the busbar

IZM6 Series Air Circuit Breakers

Outline Dimensions

Fixed type (IZM67 2000-3200A)

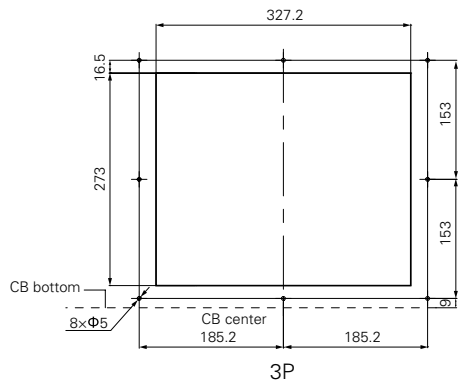
Horizontal wiring



Standard type

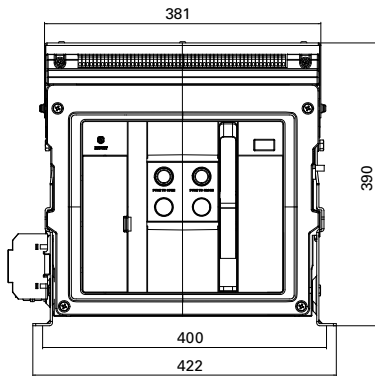
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Door escutcheon cutout

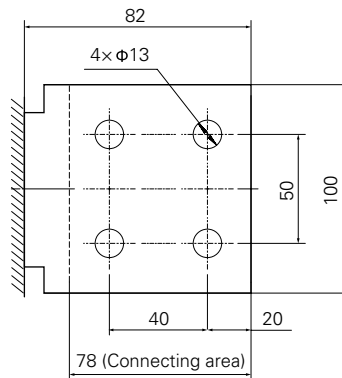
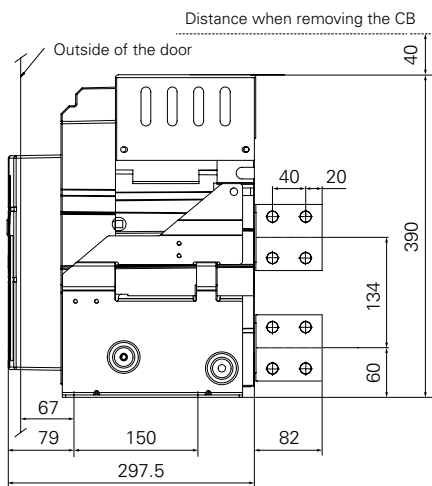
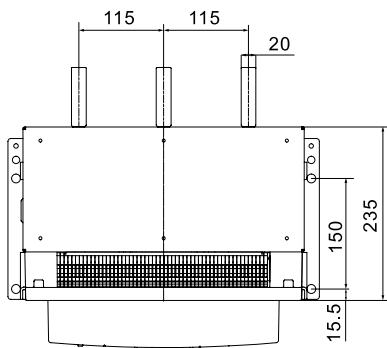


Fixed type (IZM67 4000A)

Front view



Vertical wiring



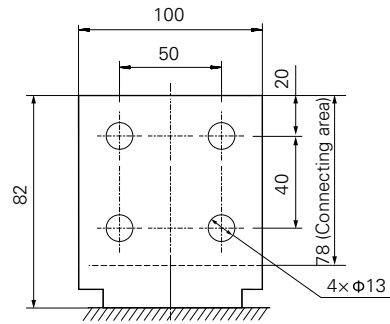
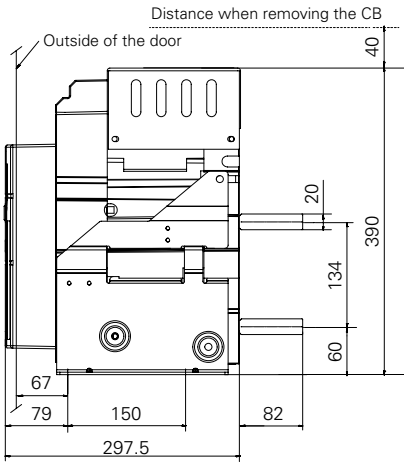
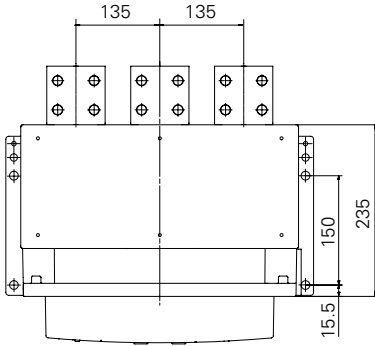
The shaded part is the lap surface of the busbar

IZM6 Series Air Circuit Breakers

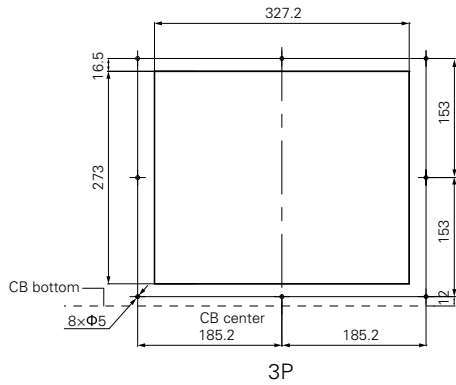
Outline Dimensions

Fixed type (IZM67 4000A)

Horizontal wiring

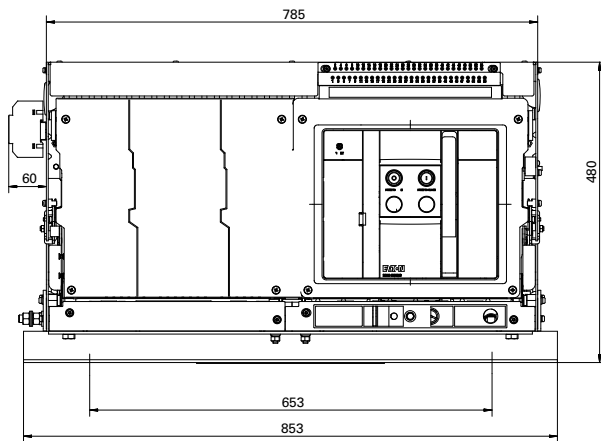


Door escutcheon cutout

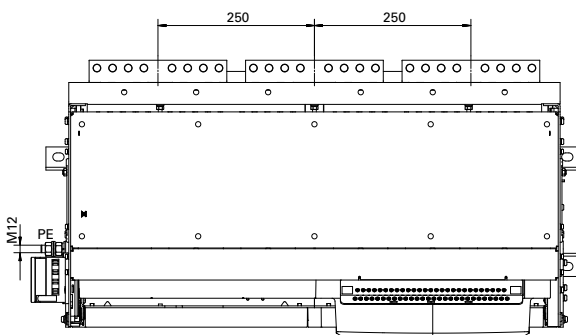


Drawout type (IZM69 4000-5000A)

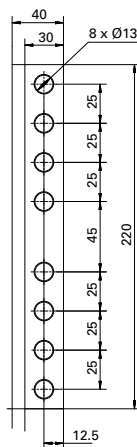
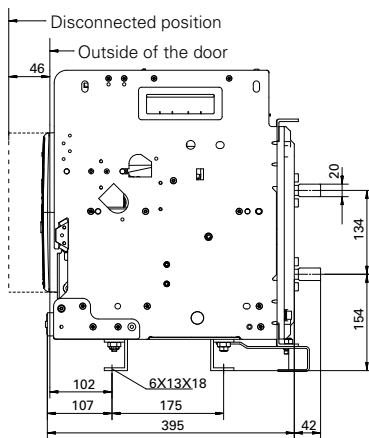
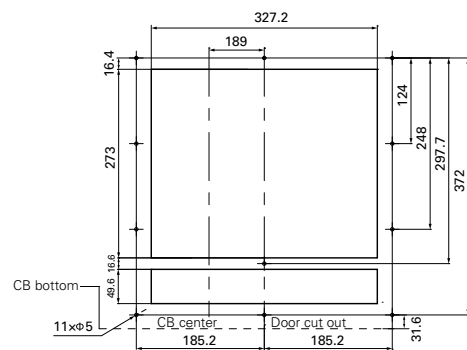
Front view



Horizontal wiring



Door escutcheon cutout

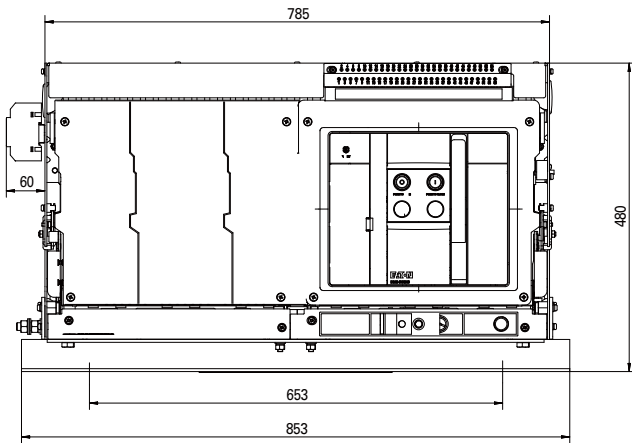


IZM6 Series Air Circuit Breakers

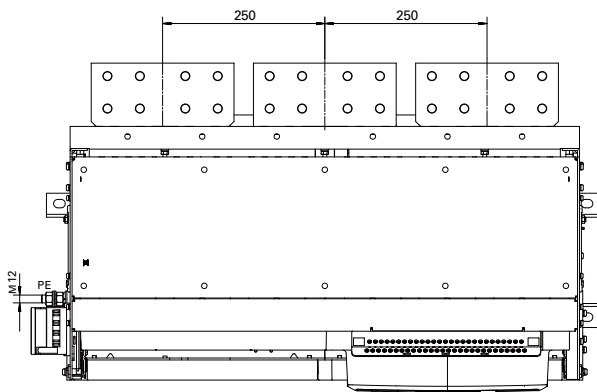
Outline Dimensions

Drawout type (IZM69 6300A)

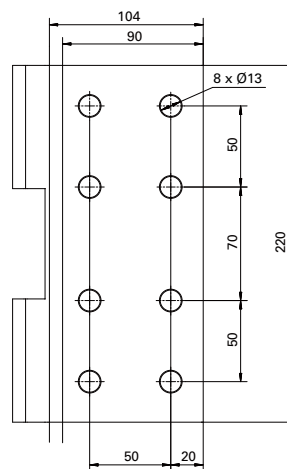
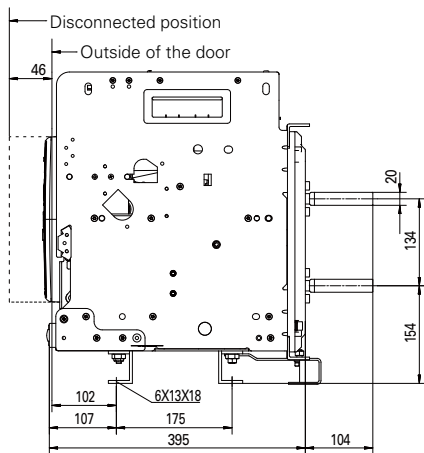
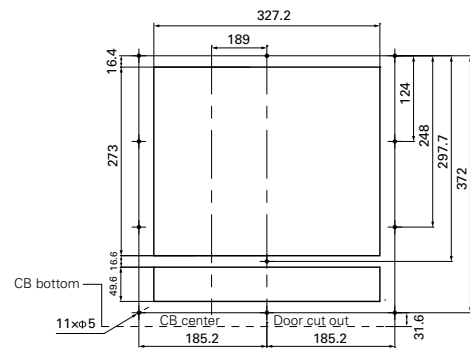
Front view



Horizontal wiring

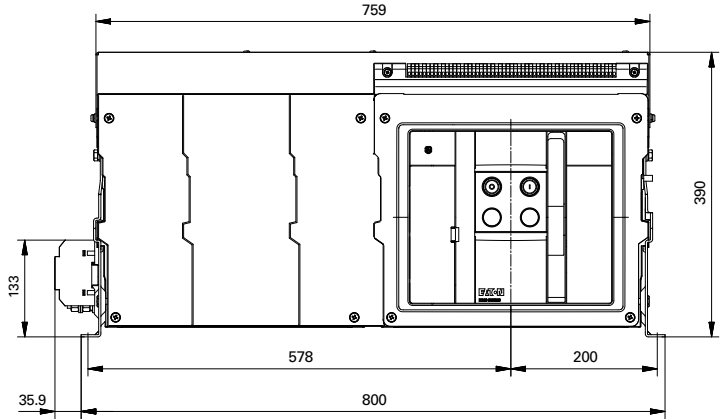


Door escutcheon cutout

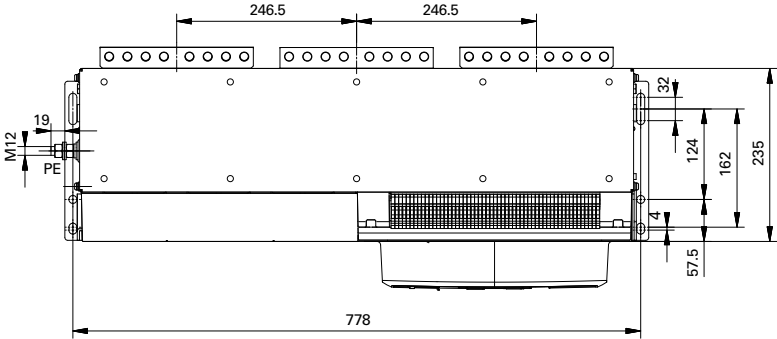


Fixed type (IZM69 4000-5000A)

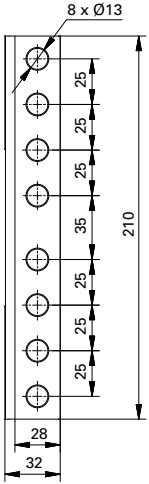
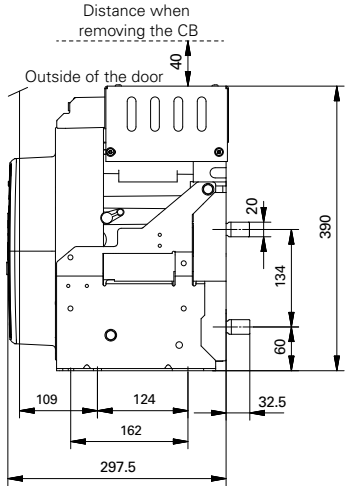
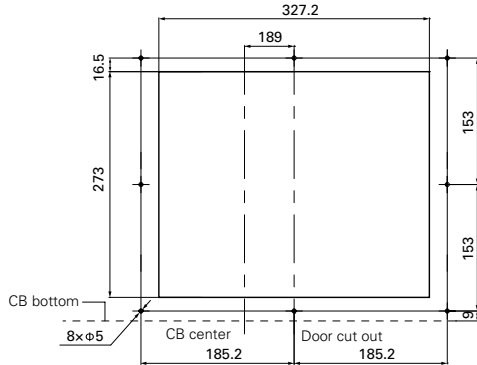
Front view



Horizontal wiring



Door escutcheon cutout

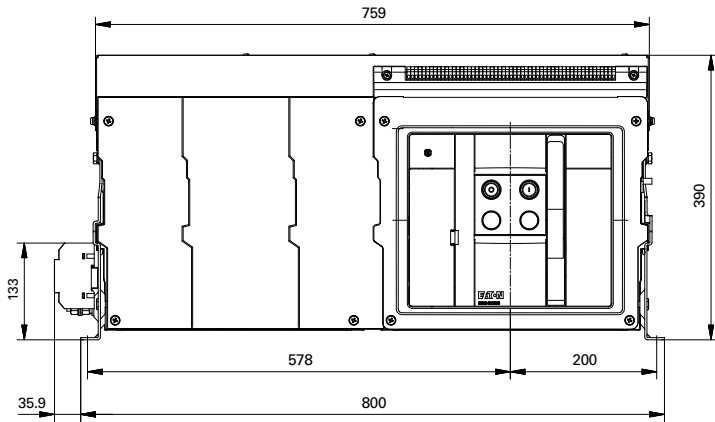


IZM6 Series Air Circuit Breakers

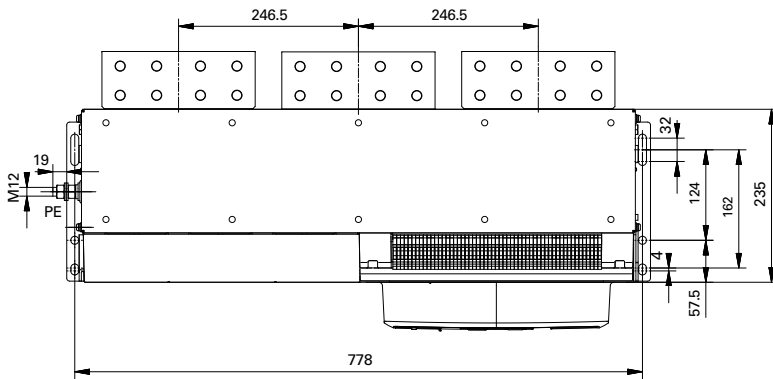
Outline Dimensions

Fixed type (IZM69 6300A)

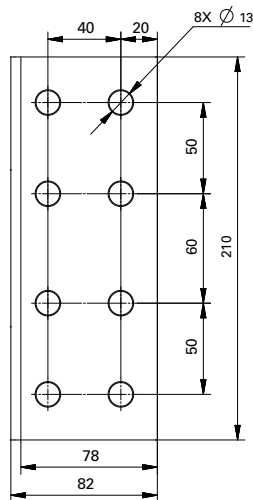
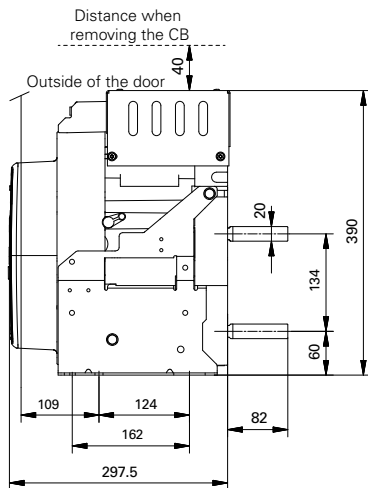
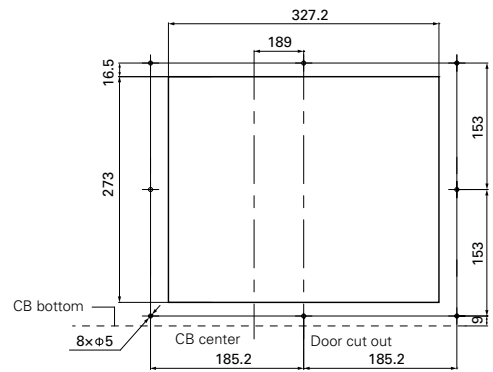
Front view



Horizontal wiring



Door escutcheon cutout



Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR6.1A trip unit supplied as standard – Current mode (LCD), drawout type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-A20WHS	CAM-92196
	2500	50	IZM67HVB3-A25WHS	CAM-92197
	3200	50	IZM67HVB3-A32WHS	CAM-92198
	4000	50	IZM67HVB3-A40WHS	CAM-92199
Current mode LSI + ground				
IZM67	2000	50	IZM67HVB3-AG20WHS	CAM-92200
	2500	50	IZM67HVB3-AG25WHS	CAM-92201
	3200	50	IZM67HVB3-AG32WHS	CAM-92202
	4000	50	IZM67HVB3-AG40WHS	CAM-92203
Current mode LSI + communication				
IZM67	2000	50	IZM67HVB3-AC20WHS	CAM-92204
	2500	50	IZM67HVB3-AC25WHS	CAM-92205
	3200	50	IZM67HVB3-AC32WHS	CAM-92206
	4000	50	IZM67HVB3-AC40WHS	CAM-92207
Current mode LSI + ground + communication				
IZM67	2000	50	IZM67HVB3-AGC20WHS	CAM-92208
	2500	50	IZM67HVB3-AGC25WHS	CAM-92209
	3200	50	IZM67HVB3-AGC32WHS	CAM-92210
	4000	50	IZM67HVB3-AGC40WHS	CAM-92211

PXR6.1A trip unit supplied as standard – Current mode (LCD), drawout type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-A20WHS	CAM-92164
	2500	66	IZM67HVN3-A25WHS	CAM-92165
	3200	66	IZM67HVN3-A32WHS	CAM-92166
	4000	66	IZM67HVN3-A40WHS	CAM-92167
Current mode LSI + ground				
IZM67	2000	66	IZM67HVN3-AG20WHS	CAM-92168
	2500	66	IZM67HVN3-AG25WHS	CAM-92169
	3200	66	IZM67HVN3-AG32WHS	CAM-92170
	4000	66	IZM67HVN3-AG40WHS	CAM-92171
Current mode LSI + communication				
IZM67	2000	66	IZM67HVN3-AC20WHS	CAM-92172
	2500	66	IZM67HVN3-AC25WHS	CAM-92173
	3200	66	IZM67HVN3-AC32WHS	CAM-92174
	4000	66	IZM67HVN3-AC40WHS	CAM-92175
Current mode LSI + ground + communication				
IZM67	2000	66	IZM67HVN3-AGC20WHS	CAM-92176
	2500	66	IZM67HVN3-AGC25WHS	CAM-92177
	3200	66	IZM67HVN3-AGC32WHS	CAM-92178
	4000	66	IZM67HVN3-AGC40WHS	CAM-92179

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR6.1E trip unit supplied as standard – Current-voltage mode (LCD), drawout type

Current-voltage mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-E20WHS	CAM-92260
	2500	50	IZM67HVB3-E25WHS	CAM-92261
	3200	50	IZM67HVB3-E32WHS	CAM-92262
	4000	50	IZM67HVB3-E40WHS	CAM-92263
Current-voltage mode LSI + ground				
IZM67	2000	50	IZM67HVB3-EG20WHS	CAM-92264
	2500	50	IZM67HVB3-EG25WHS	CAM-92265
	3200	50	IZM67HVB3-EG32WHS	CAM-92266
	4000	50	IZM67HVB3-EG40WHS	CAM-92267
Current-voltage mode LSI + communication				
IZM67	2000	50	IZM67HVB3-EC20WHS	CAM-92268
	2500	50	IZM67HVB3-EC25WHS	CAM-92269
	3200	50	IZM67HVB3-EC32WHS	CAM-92270
	4000	50	IZM67HVB3-EC40WHS	CAM-92271
Current-voltage mode LSI + ground + communication				
IZM67	2000	50	IZM67HVB3-EGC20WHS	CAM-92272
	2500	50	IZM67HVB3-EGC25WHS	CAM-92273
	3200	50	IZM67HVB3-EGC32WHS	CAM-92274
	4000	50	IZM67HVB3-EGC40WHS	CAM-92275

PXR6.1E trip unit supplied as standard – Current-voltage mode (LCD), drawout type

Current-voltage mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-E20WHS	CAM-92228
	2500	66	IZM67HVN3-E25WHS	CAM-92229
	3200	66	IZM67HVN3-E32WHS	CAM-92230
	4000	66	IZM67HVN3-E40WHS	CAM-92231
Current-voltage mode LSI + ground				
IZM67	2000	66	IZM67HVN3-EG20WHS	CAM-92232
	2500	66	IZM67HVN3-EG25WHS	CAM-92233
	3200	66	IZM67HVN3-EG32WHS	CAM-92234
	4000	66	IZM67HVN3-EG40WHS	CAM-92235
Current-voltage mode LSI + communication				
IZM67	2000	66	IZM67HVN3-EC20WHS	CAM-92236
	2500	66	IZM67HVN3-EC25WHS	CAM-92237
	3200	66	IZM67HVN3-EC32WHS	CAM-92238
	4000	66	IZM67HVN3-EC40WHS	CAM-92239
Current-voltage mode LSI + ground + communication				
IZM67	2000	66	IZM67HVN3-EGC20WHS	CAM-92240
	2500	66	IZM67HVN3-EGC25WHS	CAM-92241
	3200	66	IZM67HVN3-EGC32WHS	CAM-92242
	4000	66	IZM67HVN3-EGC40WHS	CAM-92243

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR6.1P trip unit supplied as standard – Power mode (LCD), drawout type

Power mode LSI			3P	
Frame	Rated current I _n (A)	Switching Capacity I _{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-P20WHS	CAM-92324
	2500	50	IZM67HVB3-P25WHS	CAM-92325
	3200	50	IZM67HVB3-P32WHS	CAM-92326
	4000	50	IZM67HVB3-P40WHS	CAM-92327
Power mode LSI + ground				
IZM67	2000	50	IZM67HVB3-PG20WHS	CAM-92328
	2500	50	IZM67HVB3-PG25WHS	CAM-92329
	3200	50	IZM67HVB3-PG32WHS	CAM-92330
	4000	50	IZM67HVB3-PG40WHS	CAM-92331
Power mode LSI+ communication				
IZM67	2000	50	IZM67HVB3-PC20WHS	CAM-92332
	2500	50	IZM67HVB3-PC25WHS	CAM-92333
	3200	50	IZM67HVB3-PC32WHS	CAM-92334
	4000	50	IZM67HVB3-PC40WHS	CAM-92335
Power mode LSI+ ground + communication				
IZM67	2000	50	IZM67HVB3-PGC20WHS	CAM-92336
	2500	50	IZM67HVB3-PGC25WHS	CAM-92337
	3200	50	IZM67HVB3-PGC32WHS	CAM-92338
	4000	50	IZM67HVB3-PGC40WHS	CAM-92339
Power mode LSI+ residual current				
IZM67	2000	50	IZM67HVB3-PL20WHS	CAM-92364
	2500	50	IZM67HVB3-PL25WHS	CAM-92365
	3200	50	IZM67HVB3-PL32WHS	CAM-92366
	4000	50	IZM67HVB3-PL40WHS	CAM-92367
Power mode LSI+ residual current + communication				
IZM67	2000	50	IZM67HVB3-PLC20WHS	CAM-92368
	2500	50	IZM67HVB3-PLC25WHS	CAM-92369
	3200	50	IZM67HVB3-PLC32WHS	CAM-92370
	4000	50	IZM67HVB3-PLC40WHS	CAM-92371

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR6.1P trip unit supplied as standard – Power mode (LCD), drawout type

Power mode LSI			3P	
Frame	Rated current I _n (A)	Switching Capacity I _{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-P20WHS	CAM-92292
	2500	66	IZM67HVN3-P25WHS	CAM-92293
	3200	66	IZM67HVN3-P32WHS	CAM-92294
	4000	66	IZM67HVN3-P40WHS	CAM-92295
Power mode LSI + ground				
IZM67	2000	66	IZM67HVN3-PG20WHS	CAM-92296
	2500	66	IZM67HVN3-PG25WHS	CAM-92297
	3200	66	IZM67HVN3-PG32WHS	CAM-92298
	4000	66	IZM67HVN3-PG40WHS	CAM-92299
Power mode LSI+ communication				
IZM67	2000	66	IZM67HVN3-PC20WHS	CAM-92300
	2500	66	IZM67HVN3-PC25WHS	CAM-92301
	3200	66	IZM67HVN3-PC32WHS	CAM-92302
	4000	66	IZM67HVN3-PC40WHS	CAM-92303
Power mode LSI+ ground + communication				
IZM67	2000	66	IZM67HVN3-PGC20WHS	CAM-92304
	2500	66	IZM67HVN3-PGC25WHS	CAM-92305
	3200	66	IZM67HVN3-PGC32WHS	CAM-92306
	4000	66	IZM67HVN3-PGC40WHS	CAM-92307
Power mode LSI+ residual current				
IZM67	2000	66	IZM67HVN3-PL20WHS	CAM-92356
	2500	66	IZM67HVN3-PL25WHS	CAM-92357
	3200	66	IZM67HVN3-PL32WHS	CAM-92358
	4000	66	IZM67HVN3-PL40WHS	CAM-92359
Power mode LSI+ residual current + communication				
IZM67	2000	66	IZM67HVN3-PLC20WHS	CAM-92360
	2500	66	IZM67HVN3-PLC25WHS	CAM-92361
	3200	66	IZM67HVN3-PLC32WHS	CAM-92362
	4000	66	IZM67HVN3-PLC40WHS	CAM-92363

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR6.1A trip unit supplied as standard – Current mode (LCD), drawout type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-A40WHS	CAM-92893
	5000	75	IZM69HVN3-A50WHS	CAM-92894
	6300	75	IZM69HVN3-A63WHS	CAM-92895
Current mode LSI + ground				
IZM69	4000	75	IZM69HVN3-AG40WHS	CAM-92896
	5000	75	IZM69HVN3-AG50WHS	CAM-92897
	6300	75	IZM69HVN3-AG63WHS	CAM-92898
Current mode LSI + communication				
IZM69	4000	75	IZM69HVN3-AC40WHS	CAM-92899
	5000	75	IZM69HVN3-AC50WHS	CAM-92900
	6300	75	IZM69HVN3-AC63WHS	CAM-92901
Current mode LSI + ground + communication				
IZM69	4000	75	IZM69HVN3-AGC40WHS	CAM-92902
	5000	75	IZM69HVN3-AGC50WHS	CAM-92903
	6300	75	IZM69HVN3-AGC63WHS	CAM-92904

PXR6.1E trip unit supplied as standard – Current-voltage mode (LCD), drawout type

Current-voltage mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-E40WHS	CAM-92917
	5000	75	IZM69HVN3-E50WHS	CAM-92918
	6300	75	IZM69HVN3-E63WHS	CAM-92919
Current-voltage mode LSI + ground				
IZM69	4000	75	IZM69HVN3-EG40WHS	CAM-92920
	5000	75	IZM69HVN3-EG50WHS	CAM-92921
	6300	75	IZM69HVN3-EG63WHS	CAM-92922
Current-voltage mode LSI + communication				
IZM69	4000	75	IZM69HVN3-EC40WHS	CAM-92923
	5000	75	IZM69HVN3-EC50WHS	CAM-92924
	6300	75	IZM69HVN3-EC63WHS	CAM-92925
Current-voltage mode LSI + ground + communication				
IZM69	4000	75	IZM69HVN3-EGC40WHS	CAM-92926
	5000	75	IZM69HVN3-EGC50WHS	CAM-92927
	6300	75	IZM69HVN3-EGC63WHS	CAM-92928

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR6.1P trip unit supplied as standard – Power mode (LCD), drawout type

Power mode LSI			3P	
Frame	Rated current I _n (A)	Switching Capacity I _{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-P40WHS	CAM-92941
	5000	75	IZM69HVN3-P50WHS	CAM-92942
	6300	75	IZM69HVN3-P63WHS	CAM-92943
Power mode LSI + ground				
IZM69	4000	75	IZM69HVN3-PG40WHS	CAM-92944
	5000	75	IZM69HVN3-PG50WHS	CAM-92945
	6300	75	IZM69HVN3-PG63WHS	CAM-92946
Power mode LSI+ communication				
IZM69	4000	75	IZM69HVN3-PC40WHS	CAM-92947
	5000	75	IZM69HVN3-PC50WHS	CAM-92948
	6300	75	IZM69HVN3-PC63WHS	CAM-92949
Power mode LSI+ ground + communication				
IZM69	4000	75	IZM69HVN3-PGC40WHS	CAM-92950
	5000	75	IZM69HVN3-PGC50WHS	CAM-92951
	6300	75	IZM69HVN3-PGC63WHS	CAM-92952
Power mode LSI+ residual current				
IZM69	4000	75	IZM69HVN3-PL40WHS	CAM-92965
	5000	75	IZM69HVN3-PL50WHS	CAM-92966
	6300	75	IZM69HVN3-PL63WHS	CAM-92967
Power mode LSI+ residual current + communication				
IZM69	4000	75	IZM69HVN3-PLC40WHS	CAM-92968
	5000	75	IZM69HVN3-PLC50WHS	CAM-92969
	6300	75	IZM69HVN3-PLC63WHS	CAM-92970

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR6.1A trip unit supplied as standard – Current mode (LCD), fixed type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-A20FHS	CAM-92212
	2500	50	IZM67HVB3-A25FHS	CAM-92213
	3200	50	IZM67HVB3-A32FHS	CAM-92214
	4000	50	IZM67HVB3-A40FHS	CAM-92215
Current mode LSI + ground				
IZM67	2000	50	IZM67HVB3-AG20FHS	CAM-92216
	2500	50	IZM67HVB3-AG25FHS	CAM-92217
	3200	50	IZM67HVB3-AG32FHS	CAM-92218
	4000	50	IZM67HVB3-AG40FHS	CAM-92219
Current mode LSI + communication				
IZM67	2000	50	IZM67HVB3-AC20FHS	CAM-92220
	2500	50	IZM67HVB3-AC25FHS	CAM-92221
	3200	50	IZM67HVB3-AC32FHS	CAM-92222
	4000	50	IZM67HVB3-AC40FHS	CAM-92223
Current mode LSI + ground + communication				
IZM67	2000	50	IZM67HVB3-AGC20FHS	CAM-92224
	2500	50	IZM67HVB3-AGC25FHS	CAM-92225
	3200	50	IZM67HVB3-AGC32FHS	CAM-92226
	4000	50	IZM67HVB3-AGC40FHS	CAM-92227

PXR6.1A trip unit supplied as standard – Current mode (LCD), fixed type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-A20FHS	CAM-92180
	2500	66	IZM67HVN3-A25FHS	CAM-92181
	3200	66	IZM67HVN3-A32FHS	CAM-92182
	4000	66	IZM67HVN3-A40FHS	CAM-92183
Current mode LSI + ground				
IZM67	2000	66	IZM67HVN3-AG20FHS	CAM-92184
	2500	66	IZM67HVN3-AG25FHS	CAM-92185
	3200	66	IZM67HVN3-AG32FHS	CAM-92186
	4000	66	IZM67HVN3-AG40FHS	CAM-92187
Current mode LSI + communication				
IZM67	2000	66	IZM67HVN3-AC20FHS	CAM-92188
	2500	66	IZM67HVN3-AC25FHS	CAM-92189
	3200	66	IZM67HVN3-AC32FHS	CAM-92190
	4000	66	IZM67HVN3-AC40FHS	CAM-92191
Current mode LSI + ground + communication				
IZM67	2000	66	IZM67HVN3-AGC20FHS	CAM-92192
	2500	66	IZM67HVN3-AGC25FHS	CAM-92193
	3200	66	IZM67HVN3-AGC32FHS	CAM-92194
	4000	66	IZM67HVN3-AGC40FHS	CAM-92195

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR6.1E trip unit supplied as standard – Current-voltage mode (LCD), fixed type

Current-voltage mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-E20FHS	CAM-92276
	2500	50	IZM67HVB3-E25FHS	CAM-92277
	3200	50	IZM67HVB3-E32FHS	CAM-92278
	4000	50	IZM67HVB3-E40FHS	CAM-92279
Current-voltage mode LSI + ground				
IZM67	2000	50	IZM67HVB3-EG20FHS	CAM-92280
	2500	50	IZM67HVB3-EG25FHS	CAM-92281
	3200	50	IZM67HVB3-EG32FHS	CAM-92282
	4000	50	IZM67HVB3-EG40FHS	CAM-92283
Current-voltage mode LSI + communication				
IZM67	2000	50	IZM67HVB3-EC20FHS	CAM-92284
	2500	50	IZM67HVB3-EC25FHS	CAM-92285
	3200	50	IZM67HVB3-EC32FHS	CAM-92286
	4000	50	IZM67HVB3-EC40FHS	CAM-92287
Current-voltage mode LSI + ground + communication				
IZM67	2000	50	IZM67HVB3-EGC20FHS	CAM-92288
	2500	50	IZM67HVB3-EGC25FHS	CAM-92289
	3200	50	IZM67HVB3-EGC32FHS	CAM-92290
	4000	50	IZM67HVB3-EGC40FHS	CAM-92291

PXR6.1E trip unit supplied as standard – Current-voltage mode (LCD), fixed type

Current-voltage mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-E20FHS	CAM-92244
	2500	66	IZM67HVN3-E25FHS	CAM-92245
	3200	66	IZM67HVN3-E32FHS	CAM-92246
	4000	66	IZM67HVN3-E40FHS	CAM-92247
Current-voltage mode LSI + ground				
IZM67	2000	66	IZM67HVN3-EG20FHS	CAM-92248
	2500	66	IZM67HVN3-EG25FHS	CAM-92249
	3200	66	IZM67HVN3-EG32FHS	CAM-92250
	4000	66	IZM67HVN3-EG40FHS	CAM-92251
Current-voltage mode LSI + communication				
IZM67	2000	66	IZM67HVN3-EC20FHS	CAM-92252
	2500	66	IZM67HVN3-EC25FHS	CAM-92253
	3200	66	IZM67HVN3-EC32FHS	CAM-92254
	4000	66	IZM67HVN3-EC40FHS	CAM-92255
Current-voltage mode LSI + ground + communication				
IZM67	2000	66	IZM67HVN3-EGC20FHS	CAM-92256
	2500	66	IZM67HVN3-EGC25FHS	CAM-92257
	3200	66	IZM67HVN3-EGC32FHS	CAM-92258
	4000	66	IZM67HVN3-EGC40FHS	CAM-92259

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR6.1P trip unit supplied as standard – Power mode (LCD), fixed type

Power mode LSI			3P	
Frame	Rated current I _n (A)	Switching Capacity I _{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-P20FHS	CAM-92340
	2500	50	IZM67HVB3-P25FHS	CAM-92341
	3200	50	IZM67HVB3-P32FHS	CAM-92342
	4000	50	IZM67HVB3-P40FHS	CAM-92343
Power mode LSI + ground				
IZM67	2000	50	IZM67HVB3-PG20FHS	CAM-92344
	2500	50	IZM67HVB3-PG25FHS	CAM-92345
	3200	50	IZM67HVB3-PG32FHS	CAM-92346
	4000	50	IZM67HVB3-PG40FHS	CAM-92347
Power mode LSI+ communication				
IZM67	2000	50	IZM67HVB3-PC20FHS	CAM-92348
	2500	50	IZM67HVB3-PC25FHS	CAM-92349
	3200	50	IZM67HVB3-PC32FHS	CAM-92350
	4000	50	IZM67HVB3-PC40FHS	CAM-92351
Power mode LSI+ ground + communication				
IZM67	2000	50	IZM67HVB3-PGC20FHS	CAM-92352
	2500	50	IZM67HVB3-PGC25FHS	CAM-92353
	3200	50	IZM67HVB3-PGC32FHS	CAM-92354
	4000	50	IZM67HVB3-PGC40FHS	CAM-92355
Power mode LSI+ residual current				
IZM67	2000	50	IZM67HVB3-PL20FHS	CAM-92380
	2500	50	IZM67HVB3-PL25FHS	CAM-92381
	3200	50	IZM67HVB3-PL32FHS	CAM-92382
	4000	50	IZM67HVB3-PL40FHS	CAM-92383
Power mode LSI+ residual current + communication				
IZM67	2000	50	IZM67HVB3-PLC20FHS	CAM-92384
	2500	50	IZM67HVB3-PLC25FHS	CAM-92385
	3200	50	IZM67HVB3-PLC32FHS	CAM-92386
	4000	50	IZM67HVB3-PLC40FHS	CAM-92387

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR6.1P trip unit supplied as standard – Power mode (LCD), fixed type

Power mode LSI			3P	
Frame	Rated current I _n (A)	Switching Capacity I _{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-P20FHS	CAM-92308
	2500	66	IZM67HVN3-P25FHS	CAM-92309
	3200	66	IZM67HVN3-P32FHS	CAM-92310
	4000	66	IZM67HVN3-P40FHS	CAM-92311
Power mode LSI + ground				
IZM67	2000	66	IZM67HVN3-PG20FHS	CAM-92312
	2500	66	IZM67HVN3-PG25FHS	CAM-92313
	3200	66	IZM67HVN3-PG32FHS	CAM-92314
	4000	66	IZM67HVN3-PG40FHS	CAM-92315
Power mode LSI+ communication				
IZM67	2000	66	IZM67HVN3-PC20FHS	CAM-92316
	2500	66	IZM67HVN3-PC25FHS	CAM-92317
	3200	66	IZM67HVN3-PC32FHS	CAM-92318
	4000	66	IZM67HVN3-PC40FHS	CAM-92319
Power mode LSI+ ground + communication				
IZM67	2000	66	IZM67HVN3-PGC20FHS	CAM-92320
	2500	66	IZM67HVN3-PGC25FHS	CAM-92321
	3200	66	IZM67HVN3-PGC32FHS	CAM-92322
	4000	66	IZM67HVN3-PGC40FHS	CAM-92323
Power mode LSI+ residual current				
IZM67	2000	66	IZM67HVN3-PL20FHS	CAM-92372
	2500	66	IZM67HVN3-PL25FHS	CAM-92373
	3200	66	IZM67HVN3-PL32FHS	CAM-92374
	4000	66	IZM67HVN3-PL40FHS	CAM-92375
Power mode LSI+ residual current + communication				
IZM67	2000	66	IZM67HVN3-PLC20FHS	CAM-92376
	2500	66	IZM67HVN3-PLC25FHS	CAM-92377
	3200	66	IZM67HVN3-PLC32FHS	CAM-92378
	4000	66	IZM67HVN3-PLC40FHS	CAM-92379

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR6.1A trip unit supplied as standard – Current mode (LCD), fixed type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-A40FHS	CAM-92905
	5000	75	IZM69HVN3-A50FHS	CAM-92906
	6300	75	IZM69HVN3-A63FHS	CAM-92907
Current mode LSI + ground				
IZM69	4000	75	IZM69HVN3-AG40FHS	CAM-92908
	5000	75	IZM69HVN3-AG50FHS	CAM-92909
	6300	75	IZM69HVN3-AG63FHS	CAM-92910
Current mode LSI + communication				
IZM69	4000	75	IZM69HVN3-AC40FHS	CAM-92911
	5000	75	IZM69HVN3-AC50FHS	CAM-92912
	6300	75	IZM69HVN3-AC63FHS	CAM-92913
Current mode LSI + ground + communication				
IZM69	4000	75	IZM69HVN3-AGC40FHS	CAM-92914
	5000	75	IZM69HVN3-AGC50FHS	CAM-92915
	6300	75	IZM69HVN3-AGC63FHS	CAM-92916

PXR6.1E trip unit supplied as standard – Current-voltage mode (LCD), fixed type

Current-voltage mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-E40FHS	CAM-92929
	5000	75	IZM69HVN3-E50FHS	CAM-92930
	6300	75	IZM69HVN3-E63FHS	CAM-92931
Current-voltage mode LSI + ground				
IZM69	4000	75	IZM69HVN3-EG40FHS	CAM-92932
	5000	75	IZM69HVN3-EG50FHS	CAM-92933
	6300	75	IZM69HVN3-EG63FHS	CAM-92934
Current-voltage mode LSI + communication				
IZM69	4000	75	IZM69HVN3-EC40FHS	CAM-92935
	5000	75	IZM69HVN3-EC50FHS	CAM-92936
	6300	75	IZM69HVN3-EC63FHS	CAM-92937
Current-voltage mode LSI + ground + communication				
IZM69	4000	75	IZM69HVN3-EGC40FHS	CAM-92938
	5000	75	IZM69HVN3-EGC50FHS	CAM-92939
	6300	75	IZM69HVN3-EGC63FHS	CAM-92940

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR6.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR6.1P trip unit supplied as standard – Power mode (LCD), fixed type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-P40FHS	CAM-92953
	5000	75	IZM69HVN3-P50FHS	CAM-92954
	6300	75	IZM69HVN3-P63FHS	CAM-92955
Power mode LSI + ground				
IZM69	4000	75	IZM69HVN3-PG40FHS	CAM-92956
	5000	75	IZM69HVN3-PG50FHS	CAM-92957
	6300	75	IZM69HVN3-PG63FHS	CAM-92958
Power mode LSI+ communication				
IZM69	4000	75	IZM69HVN3-PC40FHS	CAM-92959
	5000	75	IZM69HVN3-PC50FHS	CAM-92960
	6300	75	IZM69HVN3-PC63FHS	CAM-92961
Power mode LSI+ ground + communication				
IZM69	4000	75	IZM69HVN3-PGC40FHS	CAM-92962
	5000	75	IZM69HVN3-PGC50FHS	CAM-92963
	6300	75	IZM69HVN3-PGC63FHS	CAM-92964
Power mode LSI+ residual current				
IZM69	4000	75	IZM69HVN3-PL40FHS	CAM-92971
	5000	75	IZM69HVN3-PL50FHS	CAM-92972
	6300	75	IZM69HVN3-PL63FHS	CAM-92973
Power mode LSI+ residual current + communication				
IZM69	4000	75	IZM69HVN3-PLC40FHS	CAM-92974
	5000	75	IZM69HVN3-PLC50FHS	CAM-92975
	6300	75	IZM69HVN3-PLC63FHS	CAM-92976

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR4.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR4.1A trip unit supplied as standard – Current mode (LED), drawout type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-D20WHS	CAM-92484
	2500	50	IZM67HVB3-D25WHS	CAM-92485
	3200	50	IZM67HVB3-D32WHS	CAM-92486
	4000	50	IZM67HVB3-D40WHS	CAM-92487
Current mode LSI + ground				
IZM67	2000	50	IZM67HVB3-DG20WHS	CAM-92488
	2500	50	IZM67HVB3-DG25WHS	CAM-92489
	3200	50	IZM67HVB3-DG32WHS	CAM-92490
	4000	50	IZM67HVB3-DG40WHS	CAM-92491
Current mode LSI+ communication				
IZM67	2000	50	IZM67HVB3-DC20WHS	CAM-92492
	2500	50	IZM67HVB3-DC25WHS	CAM-92493
	3200	50	IZM67HVB3-DC32WHS	CAM-92494
	4000	50	IZM67HVB3-DC40WHS	CAM-92495
Current mode LSI+ ground + communication				
IZM67	2000	50	IZM67HVB3-DGC20WHS	CAM-92496
	2500	50	IZM67HVB3-DGC25WHS	CAM-92497
	3200	50	IZM67HVB3-DGC32WHS	CAM-92498
	4000	50	IZM67HVB3-DGC40WHS	CAM-92499

PXR4.1A trip unit supplied as standard – Current mode (LED), drawout type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-D20WHS	CAM-92452
	2500	66	IZM67HVN3-D25WHS	CAM-92453
	3200	66	IZM67HVN3-D32WHS	CAM-92454
	4000	66	IZM67HVN3-D40WHS	CAM-92455
Current mode LSI + ground				
IZM67	2000	66	IZM67HVN3-DG20WHS	CAM-92456
	2500	66	IZM67HVN3-DG25WHS	CAM-92457
	3200	66	IZM67HVN3-DG32WHS	CAM-92458
	4000	66	IZM67HVN3-DG40WHS	CAM-92459
Current mode LSI+ communication				
IZM67	2000	66	IZM67HVN3-DC20WHS	CAM-92460
	2500	66	IZM67HVN3-DC25WHS	CAM-92461
	3200	66	IZM67HVN3-DC32WHS	CAM-92462
	4000	66	IZM67HVN3-DC40WHS	CAM-92463
Current mode LSI+ ground + communication				
IZM67	2000	66	IZM67HVN3-DGC20WHS	CAM-92464
	2500	66	IZM67HVN3-DGC25WHS	CAM-92465
	3200	66	IZM67HVN3-DGC32WHS	CAM-92466
	4000	66	IZM67HVN3-DGC40WHS	CAM-92467

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR4.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR4.1P trip unit supplied as standard – Power mode (LED), drawout type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-F20WHS	CAM-92420
	2500	50	IZM67HVB3-F25WHS	CAM-92421
	3200	50	IZM67HVB3-F32WHS	CAM-92422
	4000	50	IZM67HVB3-F40WHS	CAM-92423
Power mode LSI + ground				
IZM67	2000	50	IZM67HVB3-FG20WHS	CAM-92424
	2500	50	IZM67HVB3-FG25WHS	CAM-92425
	3200	50	IZM67HVB3-FG32WHS	CAM-92426
	4000	50	IZM67HVB3-FG40WHS	CAM-92427
Power mode LSI+ communication				
IZM67	2000	50	IZM67HVB3-FC20WHS	CAM-92428
	2500	50	IZM67HVB3-FC25WHS	CAM-92429
	3200	50	IZM67HVB3-FC32WHS	CAM-92430
	4000	50	IZM67HVB3-FC40WHS	CAM-92431
Power mode LSI+ ground + communication				
IZM67	2000	50	IZM67HVB3-FGC20WHS	CAM-92432
	2500	50	IZM67HVB3-FGC25WHS	CAM-92433
	3200	50	IZM67HVB3-FGC32WHS	CAM-92434
	4000	50	IZM67HVB3-FGC40WHS	CAM-92435

PXR4.1P trip unit supplied as standard – Power mode (LED), drawout type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-F20WHS	CAM-92388
	2500	66	IZM67HVN3-F25WHS	CAM-92389
	3200	66	IZM67HVN3-F32WHS	CAM-92390
	4000	66	IZM67HVN3-F40WHS	CAM-92391
Power mode LSI + ground				
IZM67	2000	66	IZM67HVN3-FG20WHS	CAM-92392
	2500	66	IZM67HVN3-FG25WHS	CAM-92393
	3200	66	IZM67HVN3-FG32WHS	CAM-92394
	4000	66	IZM67HVN3-FG40WHS	CAM-92395
Power mode LSI+ communication				
IZM67	2000	66	IZM67HVN3-FC20WHS	CAM-92396
	2500	66	IZM67HVN3-FC25WHS	CAM-92397
	3200	66	IZM67HVN3-FC32WHS	CAM-92398
	4000	66	IZM67HVN3-FC40WHS	CAM-92399
Power mode LSI+ ground + communication				
IZM67	2000	66	IZM67HVN3-FGC20WHS	CAM-92400
	2500	66	IZM67HVN3-FGC25WHS	CAM-92401
	3200	66	IZM67HVN3-FGC32WHS	CAM-92402
	4000	66	IZM67HVN3-FGC40WHS	CAM-92403

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR4.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, safety shutter, arc distinguishing cover, and handle.

PXR4.1A trip unit supplied as standard – Current mode (LED), drawout type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-D40WHS	CAM-93001
	5000	75	IZM69HVN3-D50WHS	CAM-93002
	6300	75	IZM69HVN3-D63WHS	CAM-93003
Current mode LSI + ground				
IZM69	4000	75	IZM69HVN3-DG40WHS	CAM-93004
	5000	75	IZM69HVN3-DG50WHS	CAM-93005
	6300	75	IZM69HVN3-DG63WHS	CAM-93006
Current mode LSI+ communication				
IZM69	4000	75	IZM69HVN3-DC40WHS	CAM-93007
	5000	75	IZM69HVN3-DC50WHS	CAM-93008
	6300	75	IZM69HVN3-DC63WHS	CAM-93009
Current mode LSI+ ground + communication				
IZM69	4000	75	IZM69HVN3-DGC40WHS	CAM-93010
	5000	75	IZM69HVN3-DGC50WHS	CAM-93011
	6300	75	IZM69HVN3-DGC63WHS	CAM-93012

PXR4.1P trip unit supplied as standard – Power mode (LED), drawout type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-F40WHS	CAM-92977
	5000	75	IZM69HVN3-F50WHS	CAM-92978
	6300	75	IZM69HVN3-F63WHS	CAM-92979
Power mode LSI + ground				
IZM69	4000	75	IZM69HVN3-FG40WHS	CAM-92980
	5000	75	IZM69HVN3-FG50WHS	CAM-92981
	6300	75	IZM69HVN3-FG63WHS	CAM-92982
Power mode LSI+ communication				
IZM69	4000	75	IZM69HVN3-FC40WHS	CAM-92983
	5000	75	IZM69HVN3-FC50WHS	CAM-92984
	6300	75	IZM69HVN3-FC63WHS	CAM-92985
Power mode LSI+ ground + communication				
IZM69	4000	75	IZM69HVN3-FGC40WHS	CAM-92986
	5000	75	IZM69HVN3-FGC50WHS	CAM-92987
	6300	75	IZM69HVN3-FGC63WHS	CAM-92988

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR4.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR4.1A trip unit supplied as standard – Current mode (LED), fixed type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-D20FHS	CAM-92500
	2500	50	IZM67HVB3-D25FHS	CAM-92501
	3200	50	IZM67HVB3-D32FHS	CAM-92502
	4000	50	IZM67HVB3-D40FHS	CAM-92503
Current mode LSI + ground				
IZM67	2000	50	IZM67HVB3-DG20FHS	CAM-92504
	2500	50	IZM67HVB3-DG25FHS	CAM-92505
	3200	50	IZM67HVB3-DG32FHS	CAM-92506
	4000	50	IZM67HVB3-DG40FHS	CAM-92507
Current mode LSI+ communication				
IZM67	2000	50	IZM67HVB3-DC20FHS	CAM-92508
	2500	50	IZM67HVB3-DC25FHS	CAM-92509
	3200	50	IZM67HVB3-DC32FHS	CAM-92510
	4000	50	IZM67HVB3-DC40FHS	CAM-92511
Current mode LSI+ ground + communication				
IZM67	2000	50	IZM67HVB3-DGC20FHS	CAM-92512
	2500	50	IZM67HVB3-DGC25FHS	CAM-92513
	3200	50	IZM67HVB3-DGC32FHS	CAM-92514
	4000	50	IZM67HVB3-DGC40FHS	CAM-92515

PXR4.1A trip unit supplied as standard – Current mode (LED), fixed type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-D20FHS	CAM-92468
	2500	66	IZM67HVN3-D25FHS	CAM-92469
	3200	66	IZM67HVN3-D32FHS	CAM-92470
	4000	66	IZM67HVN3-D40FHS	CAM-92471
Current mode LSI + ground				
IZM67	2000	66	IZM67HVN3-DG20FHS	CAM-92472
	2500	66	IZM67HVN3-DG25FHS	CAM-92473
	3200	66	IZM67HVN3-DG32FHS	CAM-92474
	4000	66	IZM67HVN3-DG40FHS	CAM-92475
Current mode LSI+ communication				
IZM67	2000	66	IZM67HVN3-DC20FHS	CAM-92476
	2500	66	IZM67HVN3-DC25FHS	CAM-92477
	3200	66	IZM67HVN3-DC32FHS	CAM-92478
	4000	66	IZM67HVN3-DC40FHS	CAM-92479
Current mode LSI+ ground + communication				
IZM67	2000	66	IZM67HVN3-DGC20FHS	CAM-92480
	2500	66	IZM67HVN3-DGC25FHS	CAM-92481
	3200	66	IZM67HVN3-DGC32FHS	CAM-92482
	4000	66	IZM67HVN3-DGC40FHS	CAM-92483

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR4.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR4.1P trip unit supplied as standard – Power mode (LED), fixed type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	50	IZM67HVB3-F20FHS	CAM-92436
	2500	50	IZM67HVB3-F25FHS	CAM-92437
	3200	50	IZM67HVB3-F32FHS	CAM-92438
	4000	50	IZM67HVB3-F40FHS	CAM-92439
Power mode LSI + ground				
IZM67	2000	50	IZM67HVB3-FG20FHS	CAM-92440
	2500	50	IZM67HVB3-FG25FHS	CAM-92441
	3200	50	IZM67HVB3-FG32FHS	CAM-92442
	4000	50	IZM67HVB3-FG40FHS	CAM-92443
Power mode LSI+ communication				
IZM67	2000	50	IZM67HVB3-FC20FHS	CAM-92444
	2500	50	IZM67HVB3-FC25FHS	CAM-92445
	3200	50	IZM67HVB3-FC32FHS	CAM-92446
	4000	50	IZM67HVB3-FC40FHS	CAM-92447
Power mode LSI+ ground + communication				
IZM67	2000	50	IZM67HVB3-FGC20FHS	CAM-92448
	2500	50	IZM67HVB3-FGC25FHS	CAM-92449
	3200	50	IZM67HVB3-FGC32FHS	CAM-92450
	4000	50	IZM67HVB3-FGC40FHS	CAM-92451

PXR4.1P trip unit supplied as standard – Power mode (LED), fixed type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM67	2000	66	IZM67HVN3-F20FHS	CAM-92404
	2500	66	IZM67HVN3-F25FHS	CAM-92405
	3200	66	IZM67HVN3-F32FHS	CAM-92406
	4000	66	IZM67HVN3-F40FHS	CAM-92407
Power mode LSI + ground				
IZM67	2000	66	IZM67HVN3-FG20FHS	CAM-92408
	2500	66	IZM67HVN3-FG25FHS	CAM-92409
	3200	66	IZM67HVN3-FG32FHS	CAM-92410
	4000	66	IZM67HVN3-FG40FHS	CAM-92411
Power mode LSI+ communication				
IZM67	2000	66	IZM67HVN3-FC20FHS	CAM-92412
	2500	66	IZM67HVN3-FC25FHS	CAM-92413
	3200	66	IZM67HVN3-FC32FHS	CAM-92414
	4000	66	IZM67HVN3-FC40FHS	CAM-92415
Power mode LSI+ ground + communication				
IZM67	2000	66	IZM67HVN3-FGC20FHS	CAM-92416
	2500	66	IZM67HVN3-FGC25FHS	CAM-92417
	3200	66	IZM67HVN3-FGC32FHS	CAM-92418
	4000	66	IZM67HVN3-FGC40FHS	CAM-92419

IZM6 Series Air Circuit Breakers

Ordering Description

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), PXR4.1 intelligent trip unit, Overcurrent trip switches OTS (1CO), door escutcheon, wiring terminal, 220V AC to DC24V power module, arc distinguishing cover, and handle.

PXR4.1A trip unit supplied as standard – Current mode (LED), fixed type

Current mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-D40FHS	CAM-93013
	5000	75	IZM69HVN3-D50FHS	CAM-93014
	6300	75	IZM69HVN3-D63FHS	CAM-93015
Current mode LSI + ground				
IZM69	4000	75	IZM69HVN3-DG40FHS	CAM-93016
	5000	75	IZM69HVN3-DG50FHS	CAM-93017
	6300	75	IZM69HVN3-DG63FHS	CAM-93018
Current mode LSI+ communication				
IZM69	4000	75	IZM69HVN3-DC40FHS	CAM-93019
	5000	75	IZM69HVN3-DC50FHS	CAM-93020
	6300	75	IZM69HVN3-DC63FHS	CAM-93021
Current mode LSI+ ground + communication				
IZM69	4000	75	IZM69HVN3-DGC40FHS	CAM-93022
	5000	75	IZM69HVN3-DGC50FHS	CAM-93023
	6300	75	IZM69HVN3-DGC63FHS	CAM-93024

PXR4.1P trip unit supplied as standard – Power mode (LED), fixed type

Power mode LSI			3P	
Frame	Rated current I_n (A)	Switching Capacity I_{cu} (kA @1140V AC)	Part no.	Article no.
IZM69	4000	75	IZM69HVN3-F40FHS	CAM-92989
	5000	75	IZM69HVN3-F50FHS	CAM-92990
	6300	75	IZM69HVN3-F63FHS	CAM-92991
Power mode LSI + ground				
IZM69	4000	75	IZM69HVN3-FG40FHS	CAM-92992
	5000	75	IZM69HVN3-FG50FHS	CAM-92993
	6300	75	IZM69HVN3-FG63FHS	CAM-92994
Power mode LSI+ communication				
IZM69	4000	75	IZM69HVN3-FC40FHS	CAM-92995
	5000	75	IZM69HVN3-FC50FHS	CAM-92996
	6300	75	IZM69HVN3-FC63FHS	CAM-92997
Power mode LSI+ ground + communication				
IZM69	4000	75	IZM69HVN3-FGC40FHS	CAM-92998
	5000	75	IZM69HVN3-FGC50FHS	CAM-92999
	6300	75	IZM69HVN3-FGC63FHS	CAM-93000

Devices supplied as standard:

Drawout circuit breaker's basic device, cassette, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), door escutcheon, wiring terminal, safety shutter, arc distinguishing cover, and handle.

Switch disconnecter devices supplied as standard, drawout type

Frame	Rated current I_n (A)	Switching Capacity $I_{cw}(1s)$	3P	
			Part no.	Article no.
IZM69	4000	75	IN69HVN3-40WHS	CAM-93025
	5000	75	IN69HVN3-50WHS	CAM-93026
	6300	75	IN69HVN3-63WHS	CAM-93027

Devices supplied as standard:

Fixed circuit breaker's basic device, shunt coil (220V AC), closing coil (220V AC), motor operator (220V AC), auxiliary contact (4NO4NC), door escutcheon, wiring terminal, arc distinguishing cover, and handle.

Switch disconnecter devices supplied as standard, fixed type

Frame	Rated current I_n (A)	Switching Capacity $I_{cw}(1s)$	3P	
			Part no.	Article no.
IZM69	4000	75	IN69HVN3-40FHS	CAM-93028
	5000	75	IN69HVN3-50FHS	CAM-93029
	6300	75	IN69HVN3-63FHS	CAM-93030

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Eaton Corporation
Asia Pacific Headquarter
No.3, Lane 280, Linhong Road,
Changning District,
Shanghai 200335
Tel: 86-21-52000099
Fax: 86-21-52000200

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