

YA-Frame - Miniature Circuit Breakers



1 Pole
DIN mount



1 Pole
DIN mount



2 Pole
DIN mount



4 Pole
DIN mount

Product Category

- **POLARISED PRODUCT**
300 Vdc, 1 Pole & 2 Pole; (300 Vdc per Pole)
400 Vdc, 4 Pole (2 Pole in series + 2 Pole in series)
600 Vdc, (2 Pole in series)
- * Verify approvals

Features

- High energy DC circuit breaker
- Ultra compact - 13 mm wide module
- Hydraulic-magnetic technology
- Can be switched on immediately after tripping
- **YAD** - DIN mount, 45 mm front escutcheon (**Grey**)
- **YAM** - DIN mount, 57 mm front escutcheon (**Black**)
- **YAK** - Dual (Din & Mini) mount, 57 mm front escutcheon (**Black**)
- ON and OFF indication
- Suitable for electrical isolation
- 100% rating capability, independent of ambient temperature
- RoHS compliant
- Box type main terminals

Applications

- Telecom / datacom
- DC circuit protection
- UPS equipment
- Alternative energy equipment
- Battery protection

Auxiliary Switch and Trip Alarm Features

- Auxiliary switch
- AC and DC voltages
- IEC 60947-5-1 (6 A 250 Vac, 0.5 A 110 Vdc)
- GB 14048.5 approved
- Factory fitted
- Attached to right hand side of circuit breaker
- Compact 6.5 mm width



Hydraulic-Magnetic Circuit Breakers 100% rated, unaffected by ambient temperature

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Product Type	Circuit Breaker YA, Polarised Product		
Approvals	IEC 60947-2, GB14048.2, CE, UKCA, AS/NZS 60947-2		
Number of Poles	1 Pole	2 Pole	4 (2 pole in series + 2 pole in series)
Operating Voltages & Interrupting Capacity	300 Vdc @ 6 kA	300 Vdc @ 6 kA 600 Vdc @ 6 kA (Series)	400 Vdc @ 6 kA
Minimum Current Rating	0.5 A	0.5 A	0.5 A
Maximum Current Rating	50 A	50 A	32 A

Product Type	Circuit Breaker YA, Polarised Product		
Approvals	UL 489A, CSA C22.2 No. 5-16		
Number of Poles	1 & 2 Poles	2 Pole in series	4 (2 Pole in series + 2 Pole in series)
Operating Voltages & Interrupting Capacity	300 Vdc @ 10 kA	600 Vdc @ 5 kA	400 Vdc @ 10 kA
Minimum Current Rating	0.5 A	0.5 A	0.5 A
Maximum Current Rating	50 A	50 A	32 A

Verify approvals for specific ratings in accordance with the relevant test certificates.

Product Type	Circuit Breaker YA
Ambient Operating Temperature	-40 °C to +85 °C
Mounting Options	Dual (DIN and Mini rail), DIN rail mount
Time Delay Curves	Various
Endurance	10000 operations; 1500 with current, 8500 without current (IEC 60947-2 Clause 7.2.4.2)* Minimum of 1000 operations with current (UL 489A Clause 12)*
Dielectric Strength	1000 - 2000 Vac for one minute (IEC 60947-2 Clause 8.3.3.3)* 1000 Vac plus twice the rated voltage for one minute (UL 489A Clause 8)*
Rated Impulse Withstand Voltage	4 kV (IEC 60947-2 Clause 8.3.3.2)*
Weight	110 g per pole
Altitude	Certification tests conducted at altitude ≈ 2000 metres. Will operate at higher altitudes.
Shock	20 G (IEC 60068-2-27)
Vibration	3 G (IEC 60068-2-6) (sinusoidal wave)
Flammability	I3 - Ignition does not persist at 850°C after glow wire is withdrawn with an oxygen index of ≥ 28
Toxicity	F1 - Smoke index of ≤ 20 which determines the fume class
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.

Circuit Breaker	Wire Size (IEC)	Wire Gauge (UL)	Torque (IEC)	Torque (UL)	Comments
Main Terminals	2.5 mm ² to 16 mm ²	14 – 6 AWG	3.5 N.m	30 lbf.in	Pz #2 Combi head

* Refer to the standard for details