

Circuit Breakers



Precise, nuisance-free circuit protection

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(+) Design
(+) Deliver

Hydraulic magnetic circuit breakers offer high performance with high current applications. They provide precision protection and offer great advantages, such as elimination of nuisance tripping and continuous operation at 100% of current. The circuit breakers are immediately resettable and are temperature independent. They are available with a choice of non-delayed or timedelayed trip characteristics.



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Rowe Hankins supply two main ranges of Circuit Breakers, the RH and the MRH range to suit a wide application range. With current ratings up to 100A (for specific applications) employing the use of hydraulic magnetic technology.

Features & Benefits

Continuous operation at 100% rated current at temperatures between -40°C and +85°C.	DC, 50/60Hz, AC/DC and 400Hz options.
E Low smoke and zero halogen.	A simple On/Off toggle switch, this signage enables the Circuit Breaker to be fitted in either standard or reverse orientation.
 1-6 poles are available with multiple poles internally coupled; series or relay configuration with auxiliary contacts. 	Increased shock and vibration parameters.
The range has a minimum of 10,000 switching operations.	Available with M5, M6 or UNC stud terminals.
	There is a choice of various trip curves available, instant, motor start and high inrush.



The RH Range

The RH Circuit Breaker family is available from single pole units up to 6 poles. Each pole can be independently configured in terms of each terminal type and trip configuration to suit any application requirement.

The RH Circuit Breaker is designed to protect systems that in particular may have a high inrush current present upon start up, without the sacrifice of functionality or longevity of the products lifespan. Also, for systems that may be susceptible to a high interrupt capacity.

Terminal configuration

The RH range of Circuit Breakers can be supplied with a variety of different terminal configurations; screw terminals, stud terminals or solderless connections. The choice of stud terminals is available with rear connections. Alternatively, screw terminals or solderless connections are available with front connections.





Mounting

The RH Circuit Breaker mounting is achieved with the use of M4 mounting inserts.

Description	Single or Multi-pole general purpose medium current Circuit Breaker.
	Compact E-Frame configuration.
	Wide choice of trip delays; remote off, shunt trip, auxiliary switch, relay trip & high inrush.
Handle colour and marking	White toggle as standard with Black I/O identification.
Current & Voltage Rating	100A at 600V, 20 to 60Hz from a sinusoidal supply, or 125VDC.
	The contact is capable of rupturing short-circuit currents of up to 7,500A under certain conditions.
Operating Temperature and Environmental conditions	-40°C to +85°Cm Relative Humidity: 0-100%. Atmosphere Saline.
Auxiliary Contacts	NO / NC contacts activated by the function of the Circuit Breaker. The maximum rating of the auxiliary contacts is 10A, 250Vac, 50/60Hz.
Insulation	Circuit Breaker withstands voltage ratings. Test conditions; (AC, RMS, 50Hz for 1 minute). Main Contacts - mounting points 3,100V Main Contacts - auxiliary contacts 3,100V Auxiliary Contacts - mounting point 2,500V
Terminal configuration and Torque settings	M6 45mm terminals are standard. Maximum torque on main terminals studs are 34-40Nm.
Approvals Trip curve data sheet,	EN 45545-2 EN 60934 EN 60529 EN 50125-1 EN 61373 EN 600628-2-38 EN 690068-2-11 UL recognised CSA certified VDE approved CE compliant CC approved NF F62-001 NF F16-101 REACH
available on request.	RoHs



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The MRH Range

The MRH Circuit Breaker family is available in a single pole and up to 4 poles as standard. 5 and 6 poles units are subject to availability. Each pole can be independently configured in terms of terminal type and trip configuration.

The MRH Circuit Breaker is designed to protect systems that in particular may have a linear inrush current present upon start. Also, for systems that may be susceptible to high interrupt capacity, typically up to and including 5KA.

Terminal configuration

Ther MRH range of Circuit Breakers can be supplied with a variety of different terminal configurations; stud terminals, (M6, ¼-20, M5, 10-32) screw terminals, clip terminals and bullet terminals. All terminal variants are available with the rear connection.



All dimensions are in millimeters



Mounting

Circuit Breaker mounting is achieved by M3 mounting inserts.

Description	Single or Multi-Pole general, with current monitoring capabilities of up to 100A for 24Vac systems and 50A for 425Vac systems. A wide choice of trip delays; remote off; shunt trip, auxiliary switch, relay trip & high inrush.
Handle colour and marking	Black toggle as standard with black I/O marking.
Current & Voltage Rating	5-100A, 110VDC to 240Vac, 5-100A, 240Vac 50/60Hz 5-50A, 415Vac 50/60Hz, Units rated for 240/415Vac and above 50A. Not suitable for across the line motor starting.
Operating Temperature and Environmental conditions	-40°C to +85°C, Relative Humidity: 0-100%. Atmosphere Saline.
Auxiliary Contacts	Non VDE approved switches have a maximum UL rating of 10A, 250Vac, 50/60Hz: 3A, 50Volts DC. The maximum VDE ratings are 1A, 125 Volts, 60Hz and 0.1A, 125 Volts, 60Hz. Connection achieved via 2.8mm quick connect terminals.
Insulation Dielectric strength	The MRH Range protectors withstand 3750Vac, 60Hz for 60 seconds between all electrically isolated terminals. The auxiliary switch terminals shall withstand 600Vac, 60Hz. Four terminal dual coil and relay construction will withstand 1500Vac.
Terminals	M5 terminals are standard unless the current rating is 80A or over in which case M6 terminals are used. Maximum torque settings are 2mm, 3mm and 4mm respectively.
Approvals	EN 45545-2 EN 60934 EN 60947-2 EN 60529 EN 50125-1 EN 61373 EN 600628-2-38 EN 60068-2-11 UL recognised CSA certified VDE approved CE compliant CC approved NF F16-101 REACH RoHs

