

50/60 Hz



HMW401NR

# MCCB h3+ P630 Energy 4x400A 50kA

**Product Datasheet** 

#### Architecture

Frequency

Architecture	
Type of order	Toggle
Neutral position	left
Number of protected poles	4
Number of poles	4 P
Type of pole	4P4D N:0/50/100%
Fixing mode	fixing plate
Type of case	Fixed built-in
Functions	
Complete device with protection unit	yes
Version as main switch	yes
Version as emergency stop installation	no
Version as safety switch	no
Version as maintenance-/service switch	yes
Trip Unit	ENERGY
Integrated earth fault protection	no
Concurrently switching N-neutral	yes
Version as switch disconnector compact	yes
Sealable	yes
Compatibility	
Compatible with DIN rail mounting	no
Compatible with RCD AOB	yes
Controls and indicators	
Motor drive integrated	no
With Contact position indicator	yes
With fault indicator	yes
Connectivity	
ACP connection (communication)	yes
CIP connection (communication)	yes
MIP connection (communication)	yes
OAC connection (communication)	yes
PTA connection (communication)	yes
ZSI connection (communication)	yes
Main electrical features	
Rated operational voltage Ue	220 / 690 V
Type of supply voltage	AC



# Voltage

Rated insulation voltage	800 V
Rated impulse withstand voltage	8 kV
With under voltage release	no



# Electric current

Rated current	400 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	12 kA
Rating current 10°C according to IEC 60947	400 A
Rating current 150°C according to IEC 60947	400 A
Rating current 20°C according to IEC 60947	400 A
Rating current 25°C according to IEC 60947	400 A
Rating current 30°C according to IEC 60947	400 A
Rating current 35°C according to IEC 60947	400 A
Rating current 40°C according to IEC 60947	400 A
Rating current 45°C according to IEC 60947	400 A
Rating current 50°C according to IEC 60947	400 A
Rating current 55°C according to IEC 60947	400 A
Rating current 60°C according to IEC 60947	400 A
Rating current 65°C according to IEC 60947	396 A
Rating current 70°C according to IEC 60947	360 A
Rated service breaking capacity Ics under 220V AC according IEC 60947-2	85 kA
Rated service breaking capacity Ics under 230V AC according IEC 60947-2	85 kA
Rated service breaking capacity Ics under 240V AC according IEC 60947-2	85 kA
Rated service breaking capacity Ics under 380V AC according IEC 60947-2	50 kA
Rated service breaking capacity Ics under 400V AC according IEC 60947-2	50 kA
Rated service breaking capacity Ics under 415V AC according IEC 60947-2	50 kA
Rated service breaking capacity Ics under 660V AC according IEC 60947-2	12 kA
Rated service breaking capacity Ics under 690V AC according IEC 60947-2	12 kA
Breaking capacity on 1 pole for IT 230V NF 60947-2	10 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	10 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	10 kA
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 660V AC IEC 60947-2	12 kA
Frequency	
Fraguency	E0 to 60 LI=

Frequency



Power	
Total power loss under IN	90 W
Power loss per pole at In	30 W
Tripping	
Time of response when opening	10 ms
Dimensions	
Depth of installed product	150 mm
Height of installed product	260 mm
Width of installed product	185 mm
Installation, mounting	
Tightening torque	18Nm
DIN rail mounting with optional adaptator	no
Suitable for distribution board installation	yes
Suitable for front mounting	no
Suitable for ground mounting	yes
Suitable for intermediate mounting	no
Connection	
Connection	Front connection
Type of connection	Terminal



	on

Long Time protection (ltd): adjustable delay	yes
Long Time overload protection (ltd): delay (tr)	0,5 / 1,5 / 2,5 / 5 / 7,5 / 9 / 10 / 12 / 14 / 16 s
Earth fault protection (GF)	yes
Earth fault protection (GF): low speed (LSP) desactivatable	yes
Earth fault protection (GF): delay (tg)	50 / 100 / 200 / 300 / 400 / 500 ms
Instantaneous protection (Ii)	yes
Instantaneous protection (li): maximum current value	4800 A
Instantaneous protection (Ii): deactivatable	no
Instantaneous protection (li): reference for current setting	li x In 3 to 12 with steps of 0,5
Instantaneous protection (Ii): dial setting coefficient	3 / 3,5 / 4 / 4,5 / 5 / 5,5 / 6 / 6,5 / 7 / 7,5 / 8 / 8,5 / 9 / 9,5 / 10 / 10,5 / 11 / 11,5 / 12
Thermal protection: current (Ir)	160 / 200 / 250 / 300 / 350 / 400 A
Long Time overload protection (ltd)	yes
Long time delay protection (ltd): deactivatable	no
Long Time protection (ltd): delay type	adjustable
Neutral overload protection (NP)	yes
Neutral overload protection (NP): current (IN)	0 / 50 / 100 %
Pre-Trip Alarm (PTA)	yes
Short time protection (std)	yes
Short time protection by I2t curve	yes
Ground-fault protection (I2t): desactivatable	yes
Short time protection (std): deactivatable	yes
Short time protection (std): delay type	adjustable
Short time protection (std): Isd tolerance	10 %
Short time protection (std): reference for current setting	Isd = OFF / Isdx Ir 1.5 to 10 with steps of 0,5
Short time protection (std): current (lsd)	1,5 / 2 / 2,5 / 3 / 3,5 / 4 / 4,5 / 5 / 5,5 / 6 / 6,5 / 7 / 7,5 / 8 / 8,5 / 9 / 9,5 / 10
Short time protection (std): delay (tsd)	50 / 100 / 200 / 300 / 400 ms
Short time protection (std): low speed (LSP) desactivatable	yes
Cable	
Cable Material	Cu
Equipment	
Motor drive optional	yes
Can be accessorized	yes
Accept terminal cover	yes
With optional voltage release	no
Use cases	
Category of use	Covers



### Standards

Standard text	IEC 60947-2
European directive WEEE	concerned
Product categories described in the W3E directive 2012/19/EU	Category 5
Safety	
Protection index IP	IP4X
Use conditions	
Degree of pollution according to IEC 60664 / IEC 60947-2	3
Altitude	2000 m