## MOTUS®30Compact MOTUS®60Classic MOTUS®Panel Hybrid motor starter with reversing function

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For 3-pole symmetrical loads up to 4kW.

22.5mm wide, for 60mm busbar systems and EN 60715 mounting rail, integrated overload, short-circuit protection and safety function

EN 60947-1 / EN 60947-4, IEC 61508, ISO 13849 ATEX approval to EX II (2) G [Exe] [Exd] [Expx] and EX II (2) D [Ext] [Exp] cULus-listed to UL 60947-1 and UL 60947-4-1A

The amount of wiring required is reduced to a minimum by the internal locking circuit and the load wiring.

Types	max. 0.6A	max. 2.4A	max. 9A
Main circuit			
Switching principle	Safety output stage with bypass, three-phase electrically isolated switch-off		
Rated operating voltage (U <sub>e</sub> ) to IEC 60947-1	500V AC (50/60Hz)	500V AC (50/60Hz)	500V AC (50/60Hz
Operating voltage range to IEC 60947-1 Operating voltage range to UL 508	42 - 500V AC	42 - 500V AC	42 - 500V AC
Operating range of current monitoring at 20° C	0.075 - 0.6A	0.18 - 2.4A	1.2 - 9A
Rated operating current (I <sub>e</sub> ) to IEC 60947-1 AC-51 to IEC 60947-4-3 AC-53a to IEC 60947-4-2 To UL 508	0.6A 0.6A 0.6A	2.4A 2.4A 2.4A	9A 9A 6.5A
Nominal switching power to UL 508 Full Load (Power Factor = 0.4) Full Load (Power Factor = 0.8)	0.3kW (0.4HP) 0.5kW (0.6HP)	0.9kW (1.2HP) 1.7kW (2.2HP)	2.3kW (3.0HP) 4.6kW (6.1HP)
Short-circuit current rating SCCR to UL 508a	With Class CC fuse 30A CCMR30 suitable for use in circuits that do not supply more than 100kA <sub>eff</sub> symmetrical current, max. 500V.  For other values see product description.		
Leakage current (input, output)	0mA	0mA	0mA
Residual voltage at l <sub>e</sub>	< 300mV	< 400mV	< 500mV
Surge current	100A (t = 10ms)	100A (t = 10ms)	100A (t = 10ms)
nput protective circuit	Varistors, fuses		
Assignment types to IEC60947-4	FR10GR69V16 10 x 38 2		with fuse 10 x 38 20 A FR10GR69V20
1	50kA (500V)	50kA (500V)	50kA (500V)
2	10kA (500V)	10kA (500V)	5kA (400V)
Assignment types to IEC60947-4	with Class CC fuse 30A CCMR30		
1	30kA (500V)	30kA (500V)	30kA (500V)
Control circuit			<u>'</u>
Rated control supply voltage U <sub>e</sub> to IEC 60 947-1/ UL 508	24V DC	24V DC	24V DC
Control supply voltage range	19.2 - 30V DC (32V DC, max. 1 min.)		
Control supply voltage range switching level "Safe Off"	< 5V DC	< 5V DC	< 5V DC
Rated control supply current to IEC 60974-1	≤ 40mA	≤ 40mA	≤ 40mA
Control input L, R			
Switching level "Low"	3 - 9.6V DC	3 - 9.6V DC	3 - 9.6V DC
Switching level "Safe Off"	< 0.5V DC	< 0.5V DC	< 0.5V DC
Switching level "High"	19.2 - 30V DC	19.2 - 30V DC	19.2 - 30V DC
Input current	≤ 3mA	≤ 3mA	≤ 3mA
Motor overload protection to IEC / CEI 60947	Class 10A		
Safety level to IEC /CEI 61508-1 ISO 13849-1	SIL 3 Cat. 3PLe		

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## SmartWire-DT® **Communication system**

SmartWire-DT® replaces the control wiring.

Wiring system for higher-level bus via gateways for Profibus, Profinet, CANopen and Ethernet IP/MODBUS.

SmartWire-DT-Assist project planning software is available to download at www.woehner.com.

Automatic address management.

Diagnostic LED on participants.

8-pole ribbon cable for device communication.

15V +/- for supplying the electronics.

24V +/- for activating the switchgear.

3 data cables.

1 address cable.

Direction unmistakeably indicated by black arrow.

Special pliers for adapting the cable connectors.



### Module for connection to SmartWire-DT® for all MOTUS®

Plug-in module for the control circuit connections. Replaces all control wiring via SmartWire-DT®. Enable inputs 24V +/- for functional reliability.



#### Module for connection to SmartWire-DT® For all EQUES®60Classic

For all EQUES®60Classic adapters up to 80A.

Enables communication with switchgear devices (motor circuit breakers and contactors) via SmartWire-DT®.

3 inputs for signalling switches.

2 outputs for activating contactors.

24V, 0.5A continuous current, with freewheeling diode.

