# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Electromechanical reversing load motor starter for INTERBUS; fiber optic technology with 2 Mbaud, inputs (24 V DC), integrated motor protection relay (220 V AC to 440 V AC; 8 A, maximum), sensor connection via 5-pos. M12 female connectors, rugged metal housing, IP67 protection

#### **Product Features**

- Rugged metal housing
- Emergency operation on the device or via external operating elements
- Comprehensive diagnostic functions including motor current monitoring
- M12 connector for digital inputs
- ☑ Rugged Line connector for INTERBUS with fiber optic and supply voltage
- ☑ COMBICON connector for motor output



#### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	4181.0 GRM
Custom tariff number	85389091
Country of origin	Germany

#### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

#### Dimensions

Width	185.1 mm
Height	193 mm
Depth	138 mm

Ambient conditions



#### Technical data

#### Ambient conditions

Ambient temperature (operation)	0 °C 55 °C
Ambient temperature (storage/transport)	-25 °C 70 °C
Permissible humidity (operation)	100 %
Permissible humidity (storage/transport)	95 % (non-condensing)
Air pressure (operation)	860 hPa 1080 hPa (up to 1500 m above mean sea level)
Air pressure (storage/transport)	660 hPa 1080 hPa (up to 3500 m above mean sea level)
Degree of protection	IP65/IP67

#### Interfaces

Fieldbus system	INTERBUS
Designation	INTERBUS
Connection method	Fiber optics
Transmission speed	2 MBit/s

#### Power supply for module electronics

Supply voltage	24 V DC
Supply voltage range	18.5 V DC 32 V DC (including ripple)
Ripple	3.6 V <sub>pp</sub>
Current consumption	typ. 90 mA (plus power supply for sensors)

#### Mains connection

Designation	Mains connection
Connection method	POWER-COMBICON with silver contacts
Designation connection point	Terminal strip; X11 and X12
Number of positions	4
Permissible conductor cross section	2.5 mm <sup>2</sup> 4 mm <sup>2</sup>
Operating voltage	200 V AC 440 V AC (conductor voltage)
Max. current carrying capacity	20 A

#### Motor starter, output

Connection method	POWER-COMBICON
Number	1
Designation connection point	X10
Number of positions	8
Pg screw connection	Pg16
Operating voltage	200 V AC 440 V AC
Frequency range	50 Hz 60 kHz
Nominal current range	0.2 A 8 A (parameterizable, observe derating)
Utilization category	On the basis of AC 3



#### Technical data

#### Motor starter, output

Switching rate	5 cycles per minute, maximum
Motor startup time	1 s
Motor monitoring	

## Parameterization Via INTERBUS Overspeed tripping ≥ 40 A (after 1 second at I<sub>nom</sub> > 3.6 A)

#### Motor starter, brake

Continuous load current	max. 1 A
Type of contact	Mechanical relay contact
Connection method	POWER-COMBICON terminal strips
Connection voltage	12 V AC/DC 440 V AC/DC

#### **Digital inputs**

Input name	Digital inputs
Number of inputs	6
Connection method	M12 connector
	3, 4-wire
Number of positions	5
Input voltage	24 V DC (DIN EN 61131-2)
Input voltage range "0" signal	0 V 5 V
Input voltage range "1" signal	11 V 30 V
Typical input current per channel	5 mA (for U <sub>S1</sub> = 24 V)
Filter time	3 ms
Power supply for sensors	$U_{INI} = U_{S1}$ minus 1 V 50 mA Protected against inductive reverse voltages, electronically protected against short-circuiting

#### **Digital outputs**

Number of outputs	1
Connection method	M12 connector
Number of positions	5
Output current	0.5 A
Minimum output voltage with nominal current	U <sub>S1</sub> minus 2 V
Type of protection	Electronic short-circuit/overload protection

#### General

Weight	3.8 kg
Mounting type	Wall mounting
Protection class	I, IEC 61140, EN 61140, VDE 0140-1
Air and creepage distances	According to EN 50178: 1998



#### Technical data

#### General

Diagnostics messages	Mains failure, phase failure, blown fuse Error message in diagnostic code (bus) and display by means of the E LED on the motor starter
	Motor connector not plugged in, motor temperature exceeded, thermistor line short-circuited Error message in diagnostic code (bus) and display by means of the E LED on the motor starter
	Sensor supply failure Error message in diagnostic code (bus) and display by means of the E LED on the motor starter
	Failure of the actuator supply Error message in diagnostic code (bus) and display by means of the E LED on the motor starter
	Motor overcurrent Error message in diagnostic code (bus) and display by means of the E LED on the motor starter
	Output stage cannot be controlled Error message in diagnostic code (bus) and display by means of the E LED on the motor starter
	Module error during self test Message to the master

#### Classifications

#### eCl@ss

eCl@ss 4.0	27250304
eCl@ss 4.1	27250304
eCl@ss 5.0	27250304
eCl@ss 5.1	27242609
eCl@ss 6.0	27242609
eCl@ss 7.0	27242609
eCl@ss 8.0	27242609

#### ETIM

ETIM 2.0	EC001433
ETIM 3.0	EC001605
ETIM 4.0	EC001605
ETIM 5.0	EC001605

#### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404



Approvals
pprovals
pprovals
DE Zeichengenehmigung / INTERBUS CLUB
x Approvals
pprovals submitted
pproval details
NTERBUS CLUB

Phoenix Contact 2014  $\ensuremath{\mathbb{C}}$  - all rights reserved http://www.phoenixcontact.com