

Inline function terminal - IB IL EC AR 48/10A-PAC - 2819587

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Servo amplifier for DC motors with brushgear and EC motors (without brushgear)

Your advantages

- ✓ 97.6 mm design width
- ✓ Homing
- ✓ Position detection with incremental encoder
- ✓ Position, speed, and torque control
- ✓ Point-to-point positioning function
- ✓ Electronic commutation with Hall sensors
- ✓ Variable frequency drive with positioning function
- ✓ Speed profile: trapezoid or S curve

Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 956172
GTIN	4017918956172
Weight per Piece (excluding packing)	1,078.600 g
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
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Dimensions

Width	97.6 mm
Height	166 mm
Depth	85 mm

Inline function terminal - IB IL EC AR 48/10A-PAC - 2819587

Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	75 % ... 85 % (75% permanent, 85% occasionally)
Permissible humidity (storage/transport)	75 % ... 85 % (75% permanent, 85% occasionally)
Air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

Interfaces

Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kbps
Designation	Startup and diagnostics
Connection method	RS-232

Power supply for module electronics

Connection method	2-pos. COMBICON connector
Designation	Power supply
Supply voltage range	12 V DC ... 48 V DC $\pm 15\%$ (Overvoltage switch-off shutdown $U_S > 60$ V DC)
Max. current carrying capacity	10 A

Motor starter, output

Connection method	4-pos. COMBICON plug with shield clamp
Number	1
Output name	1 permanently excited DC motor with or without brushgear
Number of positions	4
Nominal current range	max. 10 A (Starting/continuous current)

Digital inputs

Number of inputs	3
Connection method	MINI COMBICON
Connection technology	3-wire (Signal, U_S , GND)
Number of positions	3
Input voltage	24 V DC

Inline potentials

Designation	Communications power (U_L)
Supply voltage	7.5 V DC (via voltage jumper)
Current consumption	typ. 30 mA

Inline function terminal - IB IL EC AR 48/10A-PAC - 2819587

Technical data

Inline potentials

	max. 120 mA
Designation	Main circuit supply (U _M)
Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	typ. 100 mA
	max. 150 mA
Designation	Segment circuit supply (U _S)
Supply voltage	24 V DC (nominal value)

General

Mounting type	DIN rail
Net weight	880 g
Note on weight specifications	with connectors

Standards and Regulations

Noise emission	Noise emission test of the housing EN 55011:1991 class A in accordance with EN 61000-6-4
Mechanical tests	Shock in acc. with EN 60068-2-27/IEC 60068-2-27 25g for 1 ms, three shocks in each direction
	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
	Free fall in acc. with IEC 60068-2-32 1 m
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

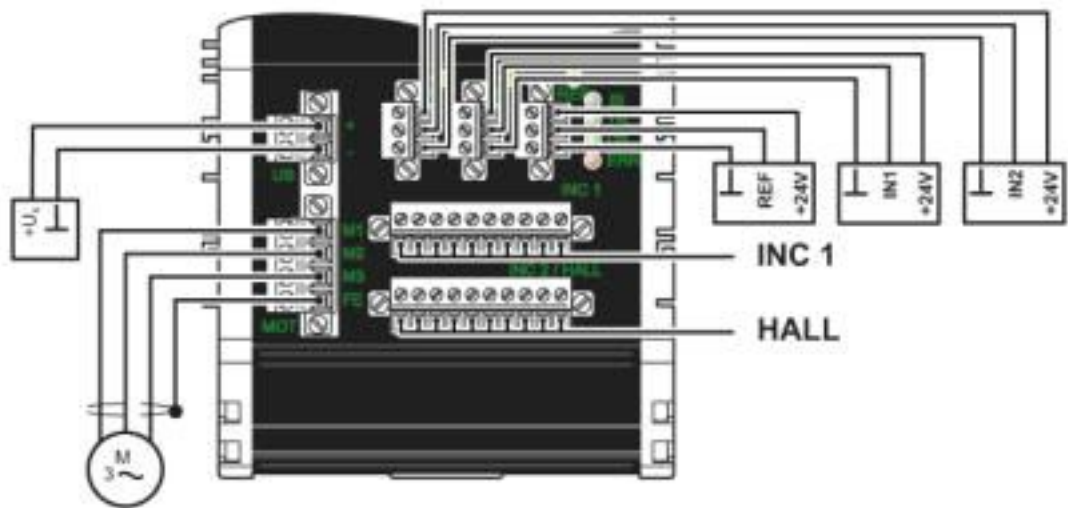
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

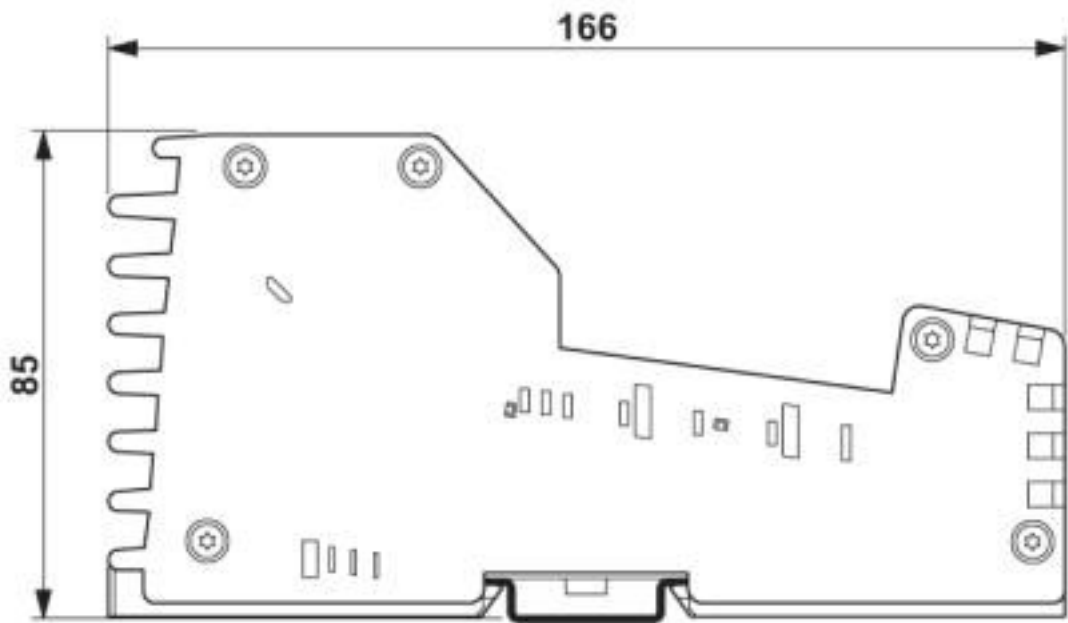
Drawings

Inline function terminal - IB IL EC AR 48/10A-PAC - 2819587

Connection diagram



Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27242609
eCl@ss 4.0	27250300

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Classifications

eCl@ss

eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242609
eCl@ss 8.0	27242609
eCl@ss 9.0	27242609

ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001605
ETIM 4.0	EC001605
ETIM 5.0	EC001605
ETIM 6.0	EC001605
ETIM 7.0	EC001605

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

Accessories

Accessories

Adapter cable

Cable - EC AR DIAG CAB - 2819736



Cable to connect the Inline servo amplifier IB IL EC AR 48/10A to the RS-232 interface of a PC to use the startup and diagnostics software

Inline function terminal - IB IL EC AR 48/10A-PAC - 2819587

Accessories

Connector set

Connector set - IB IL ECAR-PLSET - 2819561



Connector set, including shield clamps for Inline servo amplifier IB IL EC AR 48/10A

Mounting material

Shield connection clamp - IBS IL AR MOTOR SHIELD - 2819480



Shield connection clamp for IB IL DC AR 48/10A

PCB plug

Printed-circuit board connector - FRONT-MSTB 2,5/ 2-STF - 1779644



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 2, pitch: 5 mm, connection method: Front screw connection, color: green, contact surface: Tin

Printed-circuit board connector - FRONT-MC 1,5/ 3-STF-3,81 - 1850864



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 3, pitch: 3.81 mm, connection method: Front screw connection, color: green, contact surface: Tin

Inline function terminal - IB IL EC AR 48/10A-PAC - 2819587

Accessories

Printed-circuit board connector - FRONT-MSTB 2,5/ 4-STF - 1779660



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 4, pitch: 5 mm, connection method: Front screw connection, color: green, contact surface: Tin

Printed-circuit board connector - FRONT-MC 1,5/10-STF-3,81 - 1850932



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 10, pitch: 3.81 mm, connection method: Front screw connection, color: green, contact surface: Tin