PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

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Universal termination carrier for connecting 16 MACX Analog Ex i signal conditioners to digital or analog I/O cards, via D-SUB connector, 37-pos. (1:1 connection), with HART multiplexer connection

Your advantages

☑ Mechanically decoupled, passive PCB

☑ Robust aluminum profile with integrated DIN rail

☑ Side parts with integrated end clamps

☑ D-SUB pin strip system connection, 37-pos. (1:1 connection)

☑ Simple or redundant supply (decoupled from diode, protected against polarity reversal) and monitoring function implemented via separate DIN rail module

☑ Interface for connection to HART multiplexer

☑ Cable sets for signal connection are supplied as standard and do not have to be ordered separately

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356697989
Weight per Piece (excluding packing)	1,380.000 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Note

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

PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Technical data

Dimensions

Width	242 mm
Height	170 mm
Depth	160 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (Please observe module specifications)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Maximum altitude	≤ 2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Degree of protection	IP00
Shock	15g, according to IEC 60068-2-27
Vibration (operation)	2g, according to IEC 60068-2-6

General

Nominal voltage U_N	< 30 V DC (Per signal/channel)
Max. permissible current	23 mA (Signal/channel)

Supply

Designation	Power module
Note	Power supply via 2904673 TC-MACX-MCR-PTB power supply and error signaling module.
Input voltage	24 V DC
Input voltage range	19.2 V DC ... 30 V DC
Input current	≤ 2 A
Redundant supply	yes, decoupled from diodes
Polarization and surge protection	Yes
Output name	Switching output
Contact type	1 N/C contact (alarm = open)
Maximum switching voltage	50 V DC (0.3 A)
Fuse	2x 2.5 A on PCB, slow-blow (replaceable)
Status display	1 x red LED (error)
	2x green LEDs (PWR1 and PWR2)

Connection data

Connection name	Power supply
Connection method	Screw connection
Stripping length	7 mm
Number of connections	1
Number of positions	6
Conductor cross section solid	0.14 mm² ... 2.5 mm²

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Technical data

Connection data

Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12

Connection data 2

Connection name	Controller level
Connection method	D-SUB pin strip
Number of connections	1
Number of positions	37

Connection data 3

Connection name	X11
Connection method	IDC/FLK pin strip
Number of connections	1
Number of positions	14
Note	For connecting 16 HART devices to HART multiplexers

Connection data 4

Connection name	X12
Connection method	IDC/FLK pin strip
Number of connections	1
Number of positions	14
Note	For connecting a second TC-D37SUB-AIO16-EX-PS-UNI (additional 16 HART channels)

Standards and Regulations

Designation	Air clearances and creepage distances
Standards/regulations	DIN EN 50178
Rated insulation voltage	50 V
Rated surge voltage	0.5 kV
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	II
Shock	15g, according to IEC 60068-2-27
Vibration (operation)	2g, according to IEC 60068-2-6
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA/Canada	UL 61010 Listed
	Class I, Div. 2, Groups A, B, C, D T4
	Class I, Zone 2, Group IIC

Environmental Product Compliance

PHŒNIX CONTACT

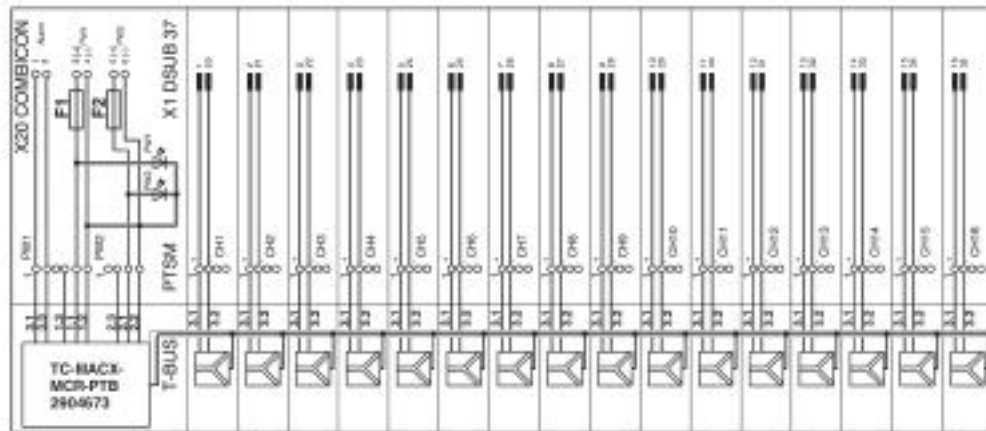# Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Technical data

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

Circuit diagram

Articles in set

Cable set - TC-C-MAX2-SC-31320000 - 2902425

Cable set for signal transmission on the Termination Carrier for modules from the MACX Analog Ex series. Connection of terminal points 3.1 and 3.2 (signal transmission) to the signal PCB.

Cable set - TC-C-PTB3-SC-SET1 - 2905216

Cable set for TC-MACX-MCR-PTB power and fault signaling module (Order No. 2904673), for use on the Termination Carrier for signal conditioners from the MACX Analog Ex series.

PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Articles in set

DIN rail bus connectors - ME 17,5 TBUS 1,5/ 5-ST-3,81 GN - 2709561

DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.

DIN rail bus connectors - ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - 2869728

DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.

Classifications

eCl@ss

eCl@ss 10.0.1	27141152
eCl@ss 4.0	27210100
eCl@ss 4.1	27210100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27141152
eCl@ss 8.0	27141152
eCl@ss 9.0	27141152

ETIM

ETIM 4.0	EC002780
ETIM 5.0	EC002780
ETIM 6.0	EC002780
ETIM 7.0	EC002780

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410

PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Classifications

UNSPSC

UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

ATEX / UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330267
Nominal voltage UN		50 V	
Nominal current IN		1 A	

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330267
Nominal voltage UN		50 V	
Nominal current IN		1 A	

EAC		RU C-DE.A*30.B.01742

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Approvals

cULus Listed	c **UL** us LISTED

Accessories

Necessary add-on products

Power and error message module - TC-MACX-MCR-PTB - 2904673

Power and fault signaling module with screw connection, only for use on the Termination Carrier, excluding corresponding DIN rail bus connector

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Power/input isolating amplifier - MACX MCR-EX-SL-RPSSI-I - 2865340

Ex i repeater power supply and input signal conditioner, HART. Transmits supplied or active 0/4 - 20 mA signals from the hazardous area to a load (active or passive) in the safe area. 3-way electrical isolation; SIL 2 according to IEC 61508, with screw connection

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Temperature measuring transducer - MACX MCR-EX-SL-RTD-I - 2865939

Ex i temperature transducer: converts signals from resistance temperature detectors installed in the Ex area and transmits a 0/4 - 20 mA signal to a load in the safe area. Freely programmable. 3-way isolation, screw connection, order configuration. Replacement item: 1052463 MACX MCR-EX-RTD-I-C.

Temperature measuring transducer - MACX MCR-EX-SL-TC-I - 2865942

Ex i temperature transducer: converts signals from thermocouples installed in the Ex area and mV sources and transmits a 0/4 - 20 mA signal to a load in the safe area. Freely programmable, custom-configured. Replacement item: 1052458 MACX MCR-EX-TC-I-C.

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Accessories

Output signal conditioner - MACX MCR-EX-SL-IDSI-I - 2865405

Ex i output signal conditioner, HART. Isolates and transmits 0/4 - 20 mA signals with intrinsic safety to a load (I/P converters, regulating valves, displays) in the Ex area. Open-circuit detection, SIL 2 in accordance with IEC 61508. Replacement item: 2908060 MACX MCR-EX-IDS-I-I.

Cable set - TC-C-MAX2-SC-32220000 - 2904446

Cable set for signal transmission and power supply on the Termination Carrier for signal conditioners from the MACX Analog Ex series. Connection of terminal points 3.2 and 2.2 (signal transmission for active input cards) to the signal PCB.

Cable - CABLE-D37SUB/B/B/ 100/KONFEK/S - 2305509

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 1 m

Cable - CABLE-D37SUB/B/B/ 200/KONFEK/S - 2305512

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 2 m

Cable - CABLE-D37SUB/B/B/ 300/KONFEK/S - 2305525

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 3 m

PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Accessories

Cable - CABLE-D37SUB/B/B/ 400/KONFEK/S - 2900759

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 4 m

Cable - CABLE-D37SUB/B/B/ 600/KONFEK/S - 2900760

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 6 m

Cable - CABLE-D37SUB/B/B/ 800/KONFEK/S - 2900761

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 8 m

Cable - CABLE-D37SUB/B/B/1000/KONFEK/S - 2900762

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 10 m

Cable - CABLE-D37SUB/B/B/1500/KONFEK/S - 2900763

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 15 m

PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Accessories

Cable - CABLE-D37SUB/B/B/2000/KONFEK/S - 2900764

Assembled shielded round cable; connection 1: D-SUB socket strip (1x 37-position); connection 2: D-SUB socket strip (1x 37-position); cable length: 20 m

Cable - CABLE-D-37SUB/F/OE/0,25/S/0,5M - 2926221

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 0.5 m

Cable - CABLE-D-37SUB/F/OE/0,25/S/1,0M - 2926234

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 1 m

Cable - CABLE-D-37SUB/F/OE/0,25/S/1,5M - 2926247

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 1.5 m

Cable - CABLE-D-37SUB/F/OE/0,25/S/2,0M - 2926250

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 2 m

PHŒNIX CONTACT

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Accessories

Cable - CABLE-D-37SUB/F/OE/0,25/S/3,0M - 2926263

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 3 m

Cable - CABLE-D-37SUB/F/OE/0,25/S/4,0M - 2926276

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 4 m

Cable - CABLE-D-37SUB/F/OE/0,25/S/6,0M - 2926289

Assembled shielded round cable; connection 1: Single wires (37-position) (The wires are marked and fitted with ferrules. The braided shield is routed to a separate cable end.); connection 2: D-SUB socket strip (1x 37-position); cable length: 6 m

Additional products

Label, highly flexible - EMLF (108XE)R - 0800549

Label, highly flexible, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: 108 x 48000 mm, Number of individual labels: 1

Zack Marker strip, flat - ZBF 15:UNBEDRUCKT - 0811202

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 15 mm, lettering field size: 15 x 5.2 mm, Number of individual labels: 5

Module carrier - TC-D37SUB-AIO16-EX-PS-UNI - 2902932

Accessories

HART multiplexer - MACX MCR-S-MUX - 2865599

HART Multiplexer for online configuration and diagnostics of HART-compatible field devices, as well as for continuous documentation of process variables and states with a PC or management system for mounting on NS 35/7.5 or NS 32

Cable - VIP-CAB-FLK14/0,14/2,0M - 2318415

Round cable set; connection 1: IDC/FLK socket strip (1x 14-position, 180 °-Out put); connection 2: IDC/FLK socket strip (1x 14-position, 90 °-out put); cable length: 2 m

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