

Module carrier - TC-2KS50-DI16-EX-PR-RS - 2905202

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Termination Carrier for redundantly connecting 16 MACX Analog Ex i NAMUR signal conditioners to digital input cards of the Yokogawa ProSafe-RS controller, via two KS50 connectors, 50-pos. Suitable for Yokogawa SDV144 card.

Your advantages

- ✓ Mechanically decoupled, passive PCB
- ✓ Redundant system connection, 50-pos. (KS/AKB-compatible)
- ✓ Simple or redundant supply (decoupled from diode, protected against polarity reversal) and monitoring function implemented via separate DIN rail module
- ✓ Robust aluminum profile with integrated DIN rail
- ✓ Side parts with integrated end clamps
- ✓ Cable sets for signal connection are supplied as standard and do not have to be ordered separately



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356951388

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

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Technical data

Ambient conditions

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	1 A (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 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Connection data 2

Connection name	Controller level
Connection method	Yokogawa KS-compatible
Number of connections	2
Number of positions	50

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

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Technical data

Standards and Regulations

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
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

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"

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.

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.

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Articles in set

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	27250313
eCl@ss 4.1	27250313
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 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

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Approvals

Ex Approvals

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
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cULus Listed	
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Accessories

Necessary add-on products

Isolation amplifier - MACX MCR-EX-SL-NAM-R - 2865434



Ex i NAMUR isolating amplifier For operating proximity sensors and switches in Ex areas. The signals are transmitted via a relay output (PDT contact) to the safe area. Line fault detection (LFD), 3-way isolation, SIL 2.

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Accessories

Signal isolator - MACX MCR-EX-SL-NAM-NAM - 2866006



Ex i NAMUR signal conditioner. For operating Ex i proximity sensors and switches in the Ex area. Passive transistor output (resistive according to EN 60947-5-6), line fault transparency, up to SIL 2 according to IEC 61508; screw connection.

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

Isolation amplifier - MACX MCR-SL-NAM-R - 2865997



NAMUR signal conditioners for operating proximity sensors and switches. The signals are transmitted to the control level via relay output (changeover contact). Line fault detection (LFD), 3-way electrical isolation, SIL 2, with screw connection.

Isolation amplifier - MACX MCR-EX-SL-NAM-YO - 2905723



Ex i NAMUR signal conditioners. For operating Ex i proximity sensors and switches in hazardous areas. Passive transistor output (resistive, Yokogawa-compatible), line fault transparency, up to SIL 2 according to IEC 61508; screw connection.

Front adapters - FLK 50-PA/EZ-DR/KS/ 100/YUC - 2900991



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 1.0 m

Module carrier - TC-2KS50-DI16-EX-PR-RS - 2905202

Accessories

Front adapters - FLK 50-PA/EZ-DR/KS/ 200/YUC - 2314299



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 2.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/ 300/YUC - 2314309



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 3.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/ 400/YUC - 2314312



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 4.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/ 500/YUC - 2321499



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 5.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/ 600/YUC - 2314927



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 6.0 m

Module carrier - TC-2KS50-DI16-EX-PR-RS - 2905202

Accessories

Front adapters - FLK 50-PA/EZ-DR/KS/ 700/YUC - 2321509



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 7.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/ 800/YUC - 2314930



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 8.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/ 900/YUC - 2321512



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 9.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1000/YUC - 2314325



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 10.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1100/YUC - 2321389



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 11.0 m

Module carrier - TC-2KS50-DI16-EX-PR-RS - 2905202

Accessories

Front adapters - FLK 50-PA/EZ-DR/KS/1200/YUC - 2321525



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 12.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1300/YUC - 2321392



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 13.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1400/YUC - 2321402



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 14.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1500/YUC - 2314338



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 15.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1600/YUC - 2321538



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 16.0 m

Module carrier - TC-2KS50-DI16-EX-PR-RS - 2905202

Accessories

Front adapters - FLK 50-PA/EZ-DR/KS/1700/YUC - 2321541



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 17.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1800/YUC - 2321554



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 18.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/1900/YUC - 2321567



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 19.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/2000/YUC - 2314503



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 20.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/2500/YUC - 2314516



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 25.0 m

Module carrier - TC-2KS50-DI16-EX-PR-RS - 2905202

Accessories

Front adapters - FLK 50-PA/EZ-DR/KS/3000/YUC - 2314529



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 30.0 m

Front adapters - FLK 50-PA/EZ-DR/KS/5000/YUC - 2318981



Cast front adapter with attached round cable and a 50-pos. socket strip injection-molded on both sides for the connection of Yokogawa controllers. Cable length: 50.0 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

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