

## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

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Termination carrier for redundantly connecting 16 PSR-ETP modules to digital output cards of the Yokogawa ProSafe-RS controller, via two KS50 connectors, 50-pos. Solution for Fire & Gas (F&G) applications. Suitable for Yokogawa SDV541 card.

### Your advantages

- ✓ Mechanically decoupled PCB
- ✓ Robust aluminum profile with integrated DIN rail
- ✓ Side parts with integrated end clamps
- ✓ Redundant system connection, 50-pos. (KS/AKB-compatible)
- ✓ Simple or redundant supply, decoupled from diode, protected against polarity reversal
- ✓ Error message in the event of power supply failure or fuse fault
- ✓ Relay output (N/O contact, floating) and flashing LED for error message
- ✓ Undervoltage monitoring at input at < 18 V DC
- ✓ Suitable for safe state on applications
- ✓ Cable sets for signal connection are not supplied as standard and must be ordered separately

### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356783736
Weight per Piece (excluding packing)	1,447.900 g
Custom tariff number	85366990
Country of origin	Germany
Note	Made to Order (non-returnable)

### Technical data

#### Note

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

# Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

## Technical data

### Dimensions

Width	304 mm
Height	170 mm
Depth	160 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
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 $U_N$	24 V DC (21.1 V ... 26.4 V)
Max. permissible current	1 A (Per signal/channel)

### Supply

Designation	Device supply
Input voltage range	21.1 V DC ... 26.4 V DC
Input current	$\leq 2$ A
Redundant supply	yes, decoupled from diodes
Polarization and surge protection	Yes
Output name	Switching output
Contact type	1 N/C contact (alarm = open)
Fuse	2.5 A on PCB, slow-blow (replaceable)
Status display	2 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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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

# Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

## Technical data

### 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
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

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

## Classifications

### eCl@ss

eCl@ss 4.0	40020600
eCl@ss 4.1	40020600
eCl@ss 5.0	27371900
eCl@ss 5.1	27371900
eCl@ss 6.0	27371800
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	30211901
UNSPSC 7.0901	39121501
UNSPSC 11	39121501
UNSPSC 12.01	39121501
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432

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## Classifications

### UNSPSC

UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals

### Approvals


#### Approvals


UL Listed / cUL Listed / EAC / cULus Listed


#### Ex Approvals

UL Listed / cUL Listed / cULus Listed

## Approval details

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

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	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

## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

### Accessories

Coupling relay - PSR-SCP- 24DC/ETP/1X1 - 2986711



Coupling relay for SIL 3 low demand applications, couples digital output signals to the periphery, 1 enabling current path, module for F&G applications, test pulse filter, plug-in screw connection, 17.5 mm width

Cable set - TC-C-PSR3-SC-A100V+A20000 - 2903391



Cable set for signal transmission and power supply on the Termination Carrier for coupling relays from the PSR-ETP series. Connection of terminal points A1 and A2 (signal transmission) as well as V+ (power supply) to the signal PCB. Suitable for PSR-SCP-24DC/ETP/1X1 (Order No. 2986711).

Coupling relay - PSR-PC50-1NO-1DO-24DC-SC - 2904664



Coupling relay for SIL 3 low demand applications, couples digital output signals to the periphery, 1 enabling current path, module for F&G applications, test pulse filter, plug-in screw connection, 17.5 mm width

Cable set - TC-C-PCX3-SC-A100V+A20000 - 2906003



Cable set for signal transmission and power supply on the Termination Carrier for PSR-PC50-1NO-1DO-24DC-SC (Order No. 2904664). Connection of terminal points A1 and A2 (signal transmission) as well as V+ (power supply) to the signal PCB.

Plug - TC-C-PTSM-50-00000000J1J1 - 2903388



Jumper plug, for looping through the confirmation contacts of unused module slots. Use on the termination carrier for safety relay modules from the PSR-FSP series.

## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

### Accessories

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

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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

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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

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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

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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

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## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

### Accessories

#### 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

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#### 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

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#### 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

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#### 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

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#### 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

## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

### Accessories

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

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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

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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

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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

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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

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## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

### Accessories

#### 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

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#### 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

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#### 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

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#### 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

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#### 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

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## Module carrier - TC-2KS50-DO16-F&G-AR-RS - 2904112

### Accessories

#### 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

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#### 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

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#### 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

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### 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

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#### 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