DAUDIN

Delight Through Connections

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iO-GRID E

Remote I/O

EtherCAT Technology Group

DAUDIN CO., LTD.

IC-03.1

Index

iO-GRIDE Industrial Applications

Product Features

- Highspeed data transfer, synchronized control commands
- Stable and real-time communication, meeting the requirement for servo motion control system
- EN-61000-6-2/EN 61000-6-4、IEC/EN/UL 61010-1、IEC/EN/UL 61010-2-201 Standards
- Synchronization with other EtherCAT devices

Application Area

- Semiconductor Manufacturing
- Handling and Assembly Technology
- Food Industry
- Robotics
- CNC Machines
- Printing and Paper Machinery
- Monitoring and Data Collection
- Plastic Machinery
- Packaging Machinery
- Tire and Rubber Industry
- Textile Industry
- Precision Instrument
- Automotive Industry
- Transportation Logistics

and more...

iO-GRIDE Product Description

EtherCAT Bridge Module

GFE Series is utilized to connect external EtherCAT Highspeed Industrial Ethernet. Bridge Module bridges the external EtherCAT signal to GFE Series. Bridge Module has a single and dual port option. The double port option supports Daisy Chain connection, suitable for users with multiple stations in their application.

Digital Input Module

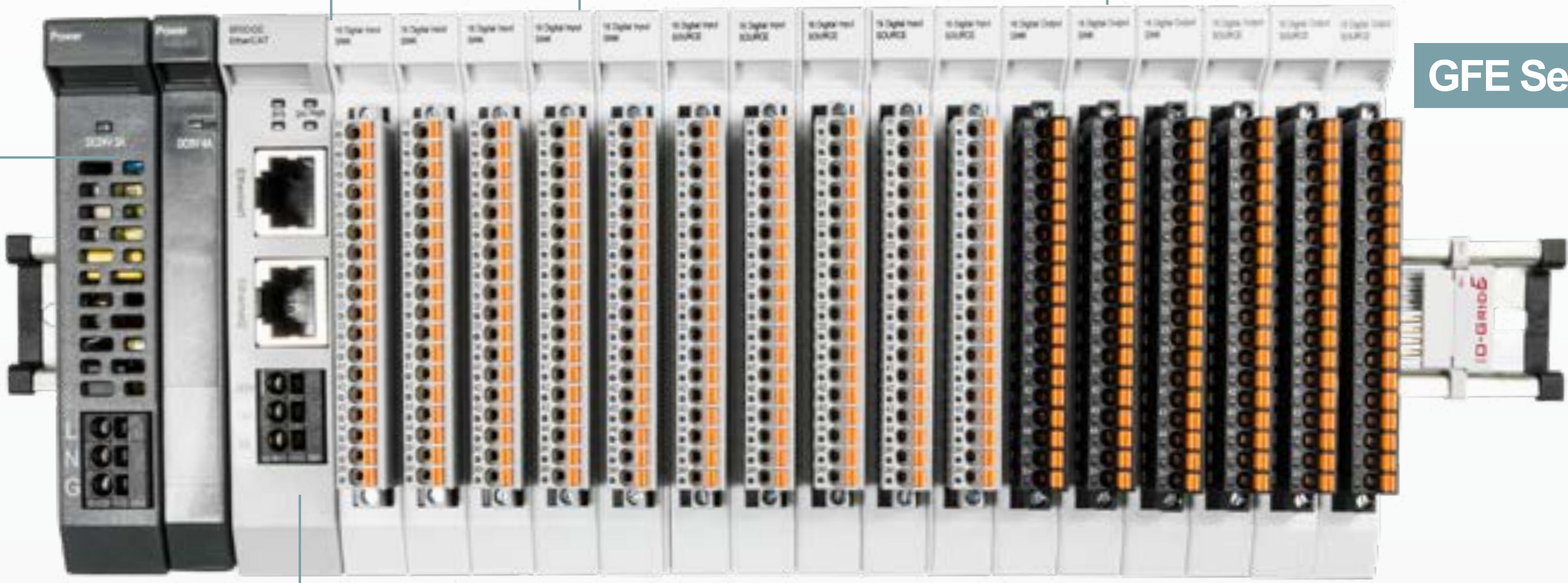
Supports both sinking and sourcing sensors and switches. Every module contains 16 channels, each channel includes LED indicator and Push In Terminal Blocks.

Digital Output Module

User can choose between the modules of sinking or sourcing, depending on the circuit requirement. Every module contains 16 channels, each channel includes LED indicator and Push In Terminal Blocks.

iO-GRID Power Supply

iO-GRID Power Supply converts the standad 100-240VAC to a stable low voltage 24 VDC. Then from 24 VDC to 5 DC, the voltage suitable for all the modules in iO-GRID system.



GFE Series Push In Terminal Blocks

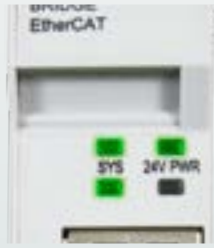
A highly dense PID (Push-In Design) Terminal Block is designed on a compact 12mm wide enclosure, allowing up to 1.5 mm^2 wire connectivity.
PID Terminal Block utilize patented fastener design, making wire connection more secure while increasing installation and maintenance operations.

EtherCAT Bridge Module Power Supply

GFE Series Bridge Module allow external power supply to input 24 VDC and connect the 24 VDC directly on to DINKLE Bus Plate. Featuring overvoltage and overcurrent protection, assuring a stable source of power.

External 24 VDC overvoltage and overcurrent protection

LED indicator to monitor the operational status of the system



Every channel includes a LED indicator

iO-GRIDE Product Selection

Bridge Module

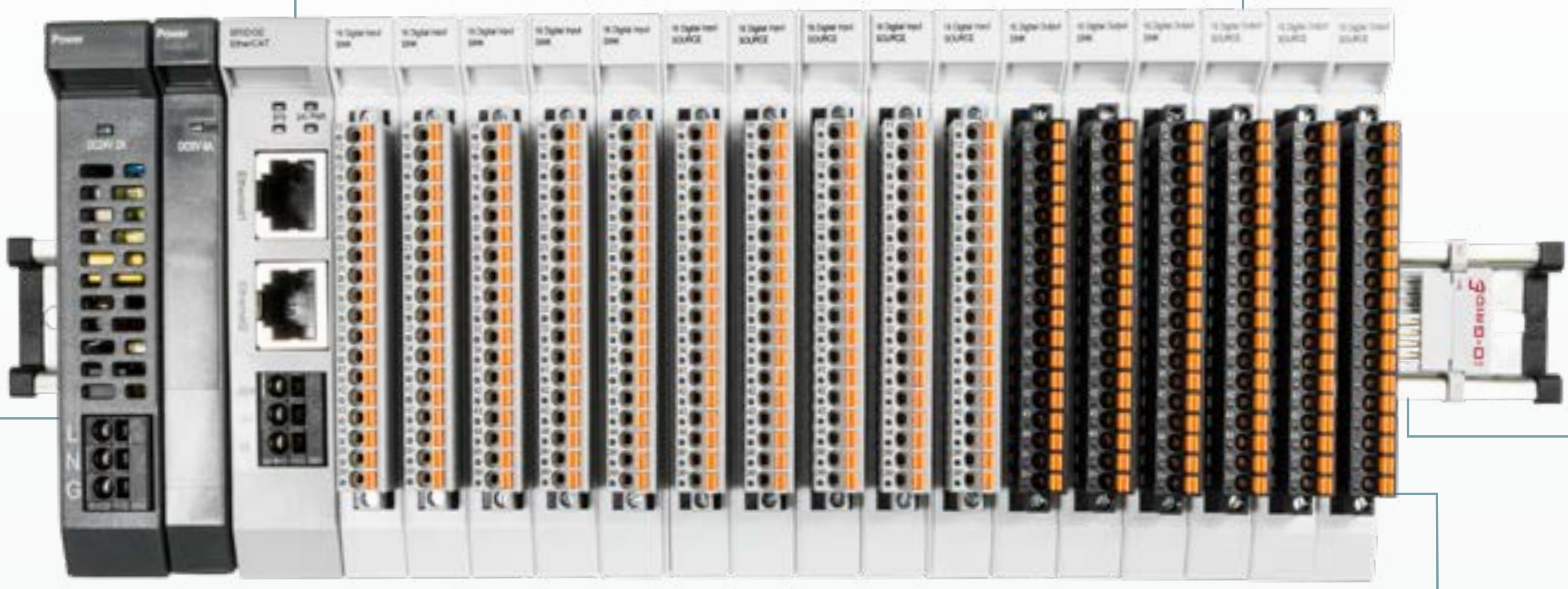
For more details, see Page. 10

GFE-BR01 GFE-BR02

Digital Input/Output Module

For more details, see Page. 11~12

GFE-DI01 GFE-DI02 GFE-DQ01 GFE-DQ02



Power Supply Module

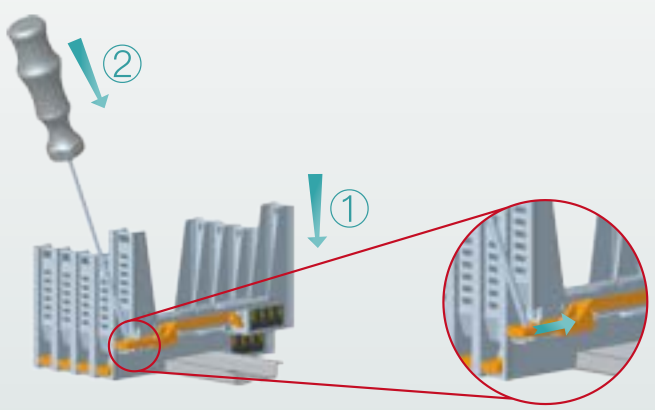
For more details, see Page. 8

GFPS-0202 GFPS-0303

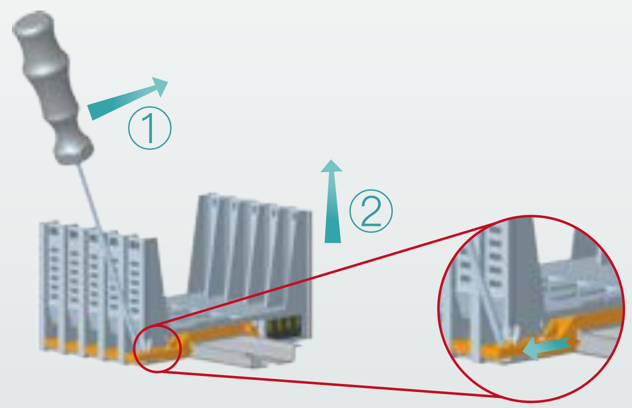
Dinkle Bus Plate

For more details, see Page. 22

Base Assembly



Base Disassembly



Base

For more details, see Page. 12

BS-5360

Base Cap

For more details, see Page. 12

BS-5361

Power Supply Module

GFPS-0202

GFPS-0303

Technical Data

Input Nominal Rating	100~240 VAC	**Input Nominal Rating**	21 ~ 28.8 VDC
Inrush Current (Cold Start)	34 A	**Max Input Current**	< 1.3 A
Rated Output Power	48 W / 2 A	**Rated Output Power**	20 W / 4 A
Output Voltage	24 VDC ± 1%	**Rated Output Voltage**	5 VDC ± 5%
Overload Protection	Hiccup overload protection	**Overload Protection**	Latching overload protection
Overload	120% ~ 185% Rated output power	**Overload**	127% ~ 170% Rated output power
Overvoltage Protection	Latching overvoltage protection	**Overvoltage Protection**	Clamping protection
Overvoltage	32-34 VDC	**Overvoltage**	6.5 VDC ~ 6.7 VDC

General Data

Dimension(WxDxH)	20 x 100 x 97 mm	**Dimension(WxDxH)**	20 x 100 x 97 mm
Weight	126 g	**Weight**	68 g
Operating Temperature	-20...+60°C	**Operating Temperature**	-20...+70°C
Relative Humidity	RH 20...90%	**Relative Humidity**	RH 20...90%
Altitude Limit	< 2000 m	**Altitude Limit**	< 2000 m
Ingress Protection(IP)	IP 20	**Ingress Protection(IP)**	IP 20
Pollution Severity	II	**Pollution Severity**	II
Safety Approval	CE	**Safety Approval**	CE
Accreditation	UL 61010-1 & UL 61010-2-201	**Accreditation**	UL 61010-1 & UL 61010-2-201
Wire Range (IEC / UL)	0.2mm^2 ~ 2.5mm^2 / AWG 26 ~ 12		
Wiring Ferrules	DN00708D DN01008D DN01508D		

Edge Computer

GFPC-0303

Technical Data

CPU	Broadcom BCM2837B0 Cortex-A53, 64-bit SoC @ 1.2 GHz	
Memory	32 GB eMMC Flash memory	
Display	HDMI * 1	
USB	USB 2.0 * 2	
Ethernet	100 Mbps Port *2	
LED Indicators	System Status LEDs * 6	
Serial port	RS485/RS422/RS232 * 1	
Power Supply Voltage	5 VDC	
Current Consumption	Max. 1A@5 VDC	

General Data

Dimension(WxDxH)	40 x 100 x 97 mm	
Weight	169 g	
Operating Temperature	0...+50°C	
Storage Temperature	-20...+75°C	
Relative Humidity	RH 95% , non-condensing	
Altitude Limit	< 2000 m	
Safety proval	CE	
Wiring Range(IE	0.2 mm^2 ~ 1.5 mm^2 / AWG 28 ~ 16	
Wiring Ferrules	DN00510D DN00710D	

Bridge Module

GFE-BR01 GFE-BR02

	GFE-BR01	GFE-BR02
Technical Data		
Supply Voltage	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Ext. Power Supply Voltage	24 VDC Overvoltage protection 32 VDC ± 2% Low voltage protection 18 VDC ± 2%	24 VDC Overvoltage protection 32 VDC ± 2% Low voltage protection 18 VDC ± 2%
Current Consumption	10 mA	205 mA
Connectors	RJ45 shielded connector for upstream	RJ45 shielded connector for upstream/downstream
LED Indicators	Status LEDs 1 Red/Green, System Power Status 1 Green, 24 VDC Ext. Power Status	Status LEDs 1 Red/Green, System Power Status 1 Green, 24 VDC Ext. Power Status
General Data		
Dimension(WxDxH)	20 x 100 x 97 mm	20 x 100 x 97 mm
Weight	75 g	81 g
Operating Temperature	0…+55°C	0…+55°C
Storage Temperature	−25…+85°C	−25…+85°C
Relative Humidity	RH 95%, non-condensing	RH 95%, non-condensing
Altitude Limit	< 2000 m	< 2000 m
Ingress Protection (IP)	IP 20	IP 20
Wiring Range(IEC/UL)	0.2 mm^2~2.5 mm^2 / AWG 26~12	0.2 mm^2~2.5 mm^2 / AWG 26~12
Wiring Ferrules	DN00508D DN00708D DN01508D	DN00508D DN00708D DN01508D

Digital Input Module

GFE-DI01 GFE-DI02

	GFE-DI01	GFE-DI02
Technical Data		
Supply Voltage	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Input Type	Sink, 24 VDC	Source, 24 VDC
On-state Signal Voltage	14…28 V	14…28 V
Off-state Signal Voltage	0…3 V	0…3 V
Input Current	5.7 mA max. @28 VDC 1.0 mA min. @14 VDC	5.7 mA max. @28 VDC 1.0 mA min. @14 VDC
Common Type	16 channels per external common (single common)	16 channels per external common (single common)
Isolation Method	Photocoupler isolation	Photocoupler isolation
Current Consumption (Module)	130 mA	130 mA
Current Consumption (External)	4.5 mA	4.5 mA
LED Indicators	Status LEDs 16 Green, Input Status 1 Red/Green, System Power/Run Status 1 Blue/Orange, Upstream/Downstream link status	Status LEDs 16 Green, Input Status 1 Red/Green, System Power/Run Status 1 Blue/Orange, Upstream/Downstream link status
General Data		
Dimension(WxDxH)	12 x 100 x 90.4 mm	12 x 100 x 90.4 mm
Weight	69 g	69 g
Operating Temperature	0...+55℃	0...+55℃
Storage Temperature	-25...+85℃	-25...+85℃
Relative Humidity	RH 95%, non-condensing	RH 95%, non-condensing
Altitude Limit	< 2000 m	< 2000 m
Ingress Protection (IP)	IP 20	IP 20
Wiring Range(IEC/UL)	0.2 mm^2~1.5 mm^2 / AWG 28~16	0.2 mm^2~1.5 mm^2 / AWG 28~16
Wiring Ferrules	DN00510D DN00710D	DN00510D DN00710D

Digital Output Module

GFE-DQ01

GFE-DQ02

	GFE-DQ01	GFE-DQ02
Technical Data		
Supply Voltage	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Output Type	Sink, 24 VDC	Source, 24 VDC
Relate Load	0.5 A per output point	0.5 A per output point
Common Type	16 channels per external common (single common)	16 channels per external common (single common)
Isolation Method	Photocoupler isolation	Photocoupler isolation
Current Consumption (Module)	160 mA	160 mA
Current Consumption (External)	10 mA	10 mA
LED Indicators	Status LEDs 16 Green, output status 1 Red/Green, System Power/Run status 1 Blue/Orange, Upstream/Downstream link status	Status LEDs 16 Green, output status 1 Red/Green, System Power/Run status 1 Blue/Orange, Upstream/Downstream link status
General Data		
Dimension(WxDxH)	12 x 100 x 90.4 mm	12 x 100 x 90.4 mm
Weight	72 g	72 g
Operating Temperature	0…+55 °C	0…+55 °C
Storage Temperature	−25…+85 °C	−25…+85 °C
Relative Humidity	RH 95%, non-condensing	RH 95%, non-condensing
Altitude Limit	< 2000 m	< 2000 m
Ingress Protection (IP)	IP 20	IP 20
Wiring Range(IEC/UL)	0.2 mm^2~1.5 mm^2 / AWG 28~16	0.2 mm^2~1.5 mm^2 / AWG 28~16
Wiring Ferrules	DN00510D DN00710D	DN00510D DN00710D

Module Base

Module Base BS-5360

Module Base (Endplate) BS-5361

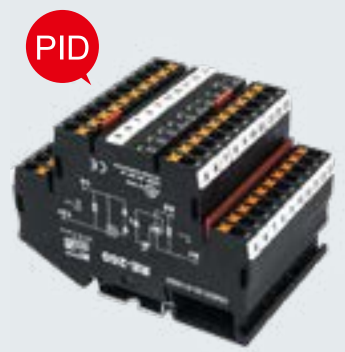
Opto Relay

Compact components efficiently use space for high-speed switching

• Extra-thin design, with extra-high mechanical and electrical durability. With a maximum load current of 6A and a switching frequency can reaching up to 10KHZ, these modules are widely used for signal isolation, where installation space is restricted.

• Further advantages include safe and reliable function, long life, touch-safe, no spark, no pollution, high insulation, a high withstand voltage of 2.5kv and a low trigger current.

PID



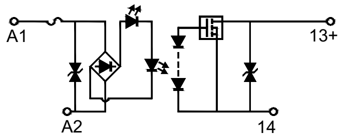
OPTO relay offers switching frequency from 10Hz-200KHz, suitable for industrial and interface applications that require signal transmission, isolation, adjustments, and amplification. The compact design has a thickness of only 6.2mm. It adopts push-in design (PID) connectivity, saving up to 50% wiring time. Suitable for solid wire or wire with ferrules for a tool free wire insertion. Printable marking labels ensuring an accurate and reliable wiring installation.

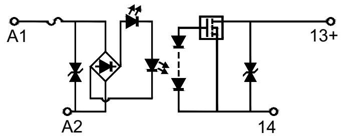
Push-in connection

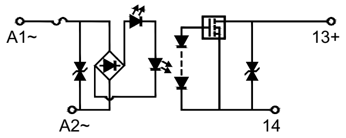
RE-2604

RE-2614

RE-2674





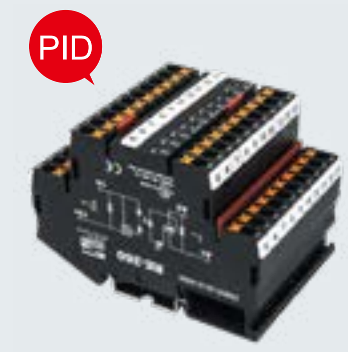


Technical Data	RE-2604	RE-2614	RE-2674
Input Data			
Rated voltage	5 VDC	24 VDC	90~240 VAC
Rated current	15-20 mA	15-20 mA	65-80 mA
Status indicator	(Red) LED	(Red) LED	(Red) LED
Max. Switching frequency	10-200 Hz*	10-200 Hz*	10 Hz
Input polarity	Bipolar	Bipolar	Bipolar
Gate voltage ON / OFF	4.7 VDC / 3.3 VDC	22 VDC / 18 VDC	50 VAC / 50 VAC
Output (Load side) Data			
Rated voltage	3~48 VDC	3~48 VDC	3~48 VDC
Continuous current	6 A	6 A	6 A
General Data			
Input type	NPN/PNP	NPN/PNP	NPN/PNP
Connection method	PID	PID	PID
Wire range (AWG / mm^2)	24~14 / 0.25~2.5	24~14 / 0.25~2.5	24~14 / 0.25~2.5
Operation temperature	-25~60℃	-25~60℃	-25~60℃
Storage temperature	-40~70℃	-40~70℃	-40~70℃
Impulse withstand voltage	2.5 KV	2.5 KV	2.5 KV
Stripping length (mm)	10	10	10
Dimensions T x W x H (mm)	6.2 x 92 x 64.5	6.2 x 92 x 64.5	6.2 x 92 x 64.5
Package	10 pcs	10 pcs	10 pcs

Accessaries Part No.	RE-2604	RE-2614	RE-2674
Insertion bridge (Plug-in)	DSD05-6.202 DSD05-6.203 DSD05-6.204 DSD05-6.205 DSD05-6.210	DSD05-6.202 DSD05-6.203 DSD05-6.204 DSD05-6.205 DSD05-6.210	DSD05-6.202 DSD05-6.203 DSD05-6.204 DSD05-6.205 DSD05-6.210
Marking label	TM43W	TM43W	TM43W
DIN Rail	TS-35 | TS-35/15	TS-35 | TS-35/15	TS-35 | TS-35/15
Screwdriver	0.6 x 3.0 mm	0.6 x 3.0 mm	0.6 x 3.0 mm

* 10Hz - full load at 6A.

PID

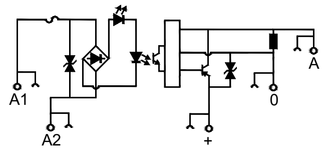


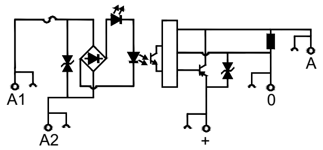
OPTO relay offers switching frequency from 10Hz-200KHz, suitable for industrial and interface applications that require signal transmission, isolation, adjustments, and amplification. The compact design has a thickness of only 6.2mm. It adopts push-in design (PID) connectivity, saving up to 50% wiring time. Suitable for solid wire or wire with ferrules for a tool free wire insertion. Printable marking labels ensuring an accurate and reliable wiring installation.

Push-in connection

RE-3704

RE-3714





Technical Data	RE-3704	RE-3714
Input Data		
Rated voltage	5 VDC	24 VDC
Rated current	10 mA	10 mA
Status indicator	(Red) LED	(Red) LED
Max. Switching frequency	200 kHz	200 kHz
Input polarity	Bipolar	Bipolar
Gate voltage ON / OFF	4.5 VDC / 4 VDC	19.2 VDC / 16.8 VDC
Output (Load side) Data		
Rated voltage	4~30 VDC	4~30 VDC
Continuous current	0.1 A	0.1 A
General Data		
Input type	Output : PNP (3-Conductor)	Output : PNP (3-Conductor)
Connection method	PID	PID
Wire range (AWG / mm^2)	24~14 / 0.25~2.5	24~14 / 0.25~2.5
Operation temperature	-25~60℃	-25~60℃
Storage temperature	-40~70℃	-40~70℃
Impulse withstand voltage	2.5 KV	2.5 KV
Stripping length (mm)	10	10
Dimensions T x W x H (mm)	6.2 x 92 x 64.5	6.2 x 92 x 64.5
Package	10 pcs	10 pcs

Accessaries Part No.	RE-3704	RE-3714
Insertion bridge (Plug-in)	DSD05-6.202-A DSD05-6.203-A DSD05-6.204-A DSD05-6.205-A DSD05-6.210-A	DSD05-6.202-A DSD05-6.203-A DSD05-6.204-A DSD05-6.205-A DSD05-6.210-A
Marking label	TM43W	TM43W
DIN Rail	TS-35 | TS-35/15	TS-35 | TS-35/15
Screwdriver	0.6 x 3.5 mm	0.6 x 3.5 mm

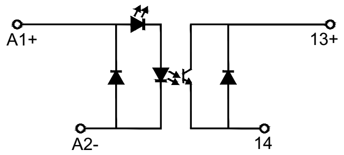
OPTO relay offers switching frequency from 10Hz-10KHz, suitable for industrial and interface applications that require signal transmission, isolation, adjustments, and amplification. The compact design has a thickness of only 6.2mm. The traditional screw connection provides a secure wire connection while offering the most cost-effective wiring solution. Printable marking labels ensuring an accurate and reliable wiring installation.

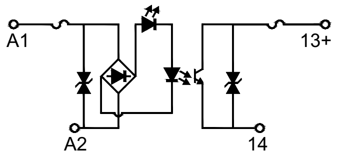
Screw connection

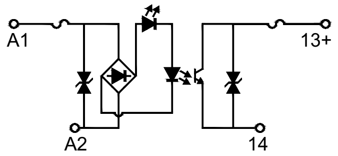
RE-0014 (RE-0014C)*

RE-0504 (RE-0504C)*

RE-0514 (RE-0514C)*







Technical Data	RE-0014	RE-0504	RE-0514
Input Data			
Rated voltage	5~30 VDC	5 VDC	24 VDC
Rated current	6 mA	15~18 mA	12~14 mA
Status indicator	(Red) LED	(Red) LED	(Red) LED
Max. Switching frequency	10 kHz	1 kHz	1 kHz
Input polarity	Monopolar	Bipolar	Bipolar
Gate voltage ON / OFF	3.2 VDC / 3.2 VDC (LED off at 2.5VDC)	4.7 VDC / 4.2 VDC	21.5 VDC / 19.5 VDC
Output (Load side) Data			
Rated voltage	3~30 VDC	3~48 VDC	3~48 VDC
Continuous current	100 mA	500 mA	500 mA
General Data			
Input type	NPN	NPN/PNP	NPN/PNP
Connection method	Screw	Screw	Screw
Wire range (AWG / mm^2)	24~12 / 0.25~4	24~12 / 0.25~4	24~12 / 0.25~4
Operation temperature	-25~60℃	-25~60℃	-25~60℃
Storage temperature	-40~70℃	-40~70℃	-40~70℃
Impulse withstand voltage	2.5 KV	2.5 KV	2.5 KV
Stripping length (mm)	7~8	7~8	7~8
Rated torque (N-m)	0.4	0.4	0.4
Dimensions T x W x H (mm)	6.2 x 92 x 64.5	6.2 x 92 x 64.5	6.2 x 92 x 64.5
Package	10 pcs	10 pcs	10 pcs
Accessaries Part No.			
End cover	DMERC-BK	DMERC-BK	DMERC-BK
Insertion bridge (Screw type)	CSC-402PN CSC-403PN CSC-404PN CSC-405PN CSC-410PN	CSC-402PN CSC-403PN CSC-404PN CSC-405PN CSC-410PN	CSC-402PN CSC-403PN CSC-404PN CSC-405PN CSC-410PN
Marking label	TM43W	TM43W	TM43W
DIN Rail	TS-35 / TS-35/15	TS-35 / TS-35/15	TS-35 / TS-35/15
Screwdriver	0.5 x 3.0 mm	0.5 x 3.0 mm	0.5 x 3.0 mm

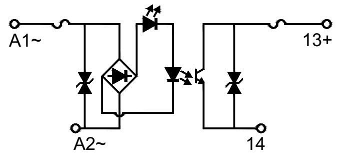
* Product with cover.

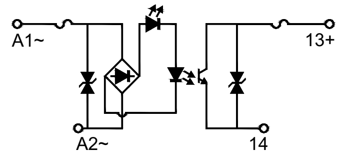
OPTO relay offers switching frequency from 10Hz-10KHz, suitable for industrial and interface applications that require signal transmission, isolation, adjustments, and amplification. The compact design has a thickness of only 6.2mm. The traditional screw connection provides a secure wire connection while offering the most cost-effective wiring solution. Printable marking labels ensuring an accurate and reliable wiring installation.

Screw connection

RE-0554 (RE-0554C)*

RE-0564 (RE-0564C)*





Technical Data	RE-0554	RE-0564
Input Data		
Rated voltage	95~125 VAC	200~240 VAC
Rated current	0.6~1.3 mA	0.6~1.1 mA
Status indicator	(Red) LED	(Red) LED
Max. Switching frequency	10 Hz	10 Hz
Input polarity	Bipolar	Bipolar
Gate voltage ON / OFF	50 VAC / 50 VAC	130 VAC / 130 VAC
Output (Load side) Data		
Rated voltage	3~48 VDC	3~48 VDC
Continuous current	500 mA	500 mA
General Data		
Input type	NPN/PNP	NPN/PNP
Connection method	Screw	Screw
Wire range (AWG / mm^2)	24~12 / 0.25~4	24~12 / 0.25~4
Operation temperature	-25~60℃	-25~60℃
Storage temperature	-40~70℃	-40~70℃
Impulse withstand voltage	2.5 KV	2.5 KV
Stripping length (mm)	7~8	7~8
Rated torque (N-m)	0.4	0.4
Dimensions T x W x H (mm)	6.2 x 92 x 64.5	6.2 x 92 x 64.5
Package	10 pcs	10 pcs
Accessaries Part No.		
End cover	DMERC-BK	DMERC-BK
Insertion bridge (Screw type)	CSC-402PN CSC-403PN CSC-404PN CSC-405PN CSC-410PN	CSC-402PN CSC-403PN CSC-404PN CSC-405PN CSC-410PN
Marking label	TM43W	TM43W
DIN Rail	TS-35 / TS-35/15	TS-35 / TS-35/15
Screwdriver	0.5 x 3.0 mm	0.5 x 3.0 mm

* Product with cover.

Slim Relay

DINKLE introduces Slim Relay, the newest member to the RER Series.

At only 6.2mm wide, the new ultra-thin Slim Relay can greatly improve the design layout of the limited space inside all electrical control panels.

Compact and Universal

The slim relay adopts screw connection, which has excellent wiring strength, multi-voltage input from 24V, 110V, 230V; ideal for PLC controller, robotic arm, CNC equipment, interface control platform and other industrial control application. The slim relay is designed with circuit protection, offering a safer operation condition for the user. Only 6.2mm in thickness, the design helps to improve the efficiency in the use of cabinet space..

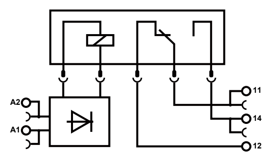
- Easy replacement of relay with the push the lever
- Multi-voltage input from 24V to 230V
- Compact 6.2mm design
- Status LED indicator
- Surge protection design

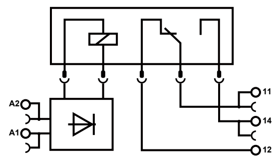
Screw connection

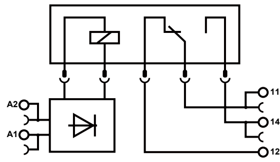
RER-24-1A

RER-110-2B

RER-230-3B







Technical Data

		RER-24-1A	RER-110-2B	RER-230-3B
Input Data				
Rated voltage		24 VAC / VDC	110 VAC / VDC	230 VAC / VDC
Rated current		11.1 mA	3.4 mA	3.7 mA
Typical response time		≦ 8 ms	≦ 8 ms	≦ 8 ms
Typical release time		≦ 4 ms	≦ 4 ms	≦ 4 ms
Protective circuit		Bridge rectifier Surge protection	Bridge rectifier	Bridge rectifier
Status indicator		(Green) LED	(Green) LED	(Green) LED
Contact				
Contact form		1C	1C	1C
Contact rating (Res. load)		6 A, 250 VAC / 30 VDC	6 A, 250 VAC / 30 VDC	6 A, 250 VAC / 30 VDC
Max. switching voltage		400 VAC / 125 VDC	400 VAC / 125 VDC	400 VAC / 125 VDC
Max. switching current		6 A	6 A	6 A
Contact resistance		≦ 100 mΩ (1 A, 6 VDC)	≦ 100 mΩ (1 A, 6 VDC)	≦ 100 mΩ (1 A, 6 VDC)
Mechanical endurance		1 x 10^7cycles	1 x 10^7cycles	1 x 10^7cycles
Electrical endurance		3 x 10^4 cycles,NO 1 x 10^4cycles,NC	3 x 10^4 cycles,NO 1 x 10^4cycles,NC	3 x 10^4 cycles,NO 1 x 10^4cycles,NC
General				
Dielectric strength	Coil & contacts	4000 VAC / 1 min	4000 VAC / 1 min	4000 VAC / 1 min
	Open contacts	1000 VAC / 1 min	1000 VAC / 1 min	1000 VAC / 1 min
Shock resistance	Functional	49 m/s²	49 m/s²	49 m/s²
	Destructive	980 m/s²	980 m/s²	980 m/s²
Ambient	Temperature	-40~85 ℃	-40~85 ℃	-40~85 ℃
	Humidity	5~85% RH	5~85% RH	5~85% RH
Dimensions T x W x H (mm)		6.2 x 78.8 x 96	6.2 x 78.8 x 96	6.2 x 78.8 x 96
Wire range (AWG / mm²)		20-16 / 0.5-1.5	20-16 / 0.5-1.5	20-16 / 0.5-1.5
Connection method		Screw	Screw	Screw
Rated torque (N-m)		0.5	0.5	0.5
Accessories Part No.				
Insertion bridge (Plug-in)		0149-4S-20	0149-4S-20	0149-4S-20
DIN Rail		TS-35 | TS-35/15	TS-35 | TS-35/15	TS-35 | TS-35/15
Screwdriver		0.4 x 2.5 mm	0.4 x 2.5 mm	0.4 x 2.5 mm
End Brackets		SS4N	SS4N	SS4N

Compact and Powerful

The slim relay adopts spring clamp connection, which has excellent resistance to vibration, multi-voltage input from 24V, 110V, 230V; ideal for PLC controller, robotic arm, CNC equipment, interface control platform and other industrial control application. The slim relay is designed with circuit protection, offering a safer operation condition for the user. Only 6.2mm in thickness, the design helps to improve the efficiency in the use of cabinet space.

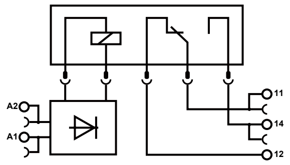
- Easy replacement of relay with the push the lever
- Spring clamp connection for quick wiring
- Compact 6.2mm design
- Status LED indicator
- Surge protection design

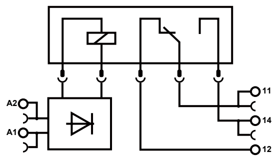
Push In Type

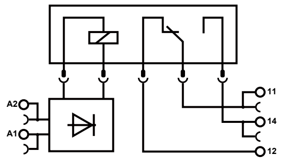
RER-24-4A

RER-110-5B

RER-230-6B







Technical Data

		RER-24-4A	RER-110-5B	RER-230-6B
Input Data				
Rated voltage		24 VAC / VDC	110 VAC / VDC	230 VAC / VDC
Rated current		11.1 mA	3.4 mA	3.7 mA
Typical response time		≦ 8 ms	≦ 8 ms	≦ 8 ms
Typical release time		≦ 4 ms	≦ 4 ms	≦ 4 ms
Protective circuit		Bridge rectifier Surge protection	Bridge rectifier	Bridge rectifier
Status indicator		(Green) LED	(Green) LED	(Green) LED
Contact				
Contact form		1C	1C	1C
Contact rating (Res. load)		6 A, 250 VAC / 30 VDC	6 A, 250 VAC / 30 VDC	6 A, 250 VAC / 30 VDC
Max. switching voltage		400 VAC / 125 VDC	400 VAC / 125 VDC	400 VAC / 125 VDC
Max. switching current		6 A	6 A	6 A
Contact resistance		≦ 100 mΩ (1 A, 6 VDC)	≦ 100 mΩ (1 A, 6 VDC)	≦ 100 mΩ (1 A, 6 VDC)
Mechanical endurance		1 x 10^7cycles	1 x 10^7cycles	1 x 10^7cycles
Electrical endurance		3 x 10^4 cycles,NO 1 x 10^4cycles,NC	3 x 10^4 cycles,NO 1 x 10^4cycles,NC	3 x 10^4 cycles,NO 1 x 10^4cycles,NC
General				
Dielectric strength	Coil & contacts	4000 VAC / 1 min	4000 VAC / 1 min	4000 VAC / 1 min
	Open contacts	1000 VAC / 1 min	1000 VAC / 1 min	1000 VAC / 1 min
Shock resistance	Functional	49 m/s^2	49 m/s^2	49 m/s^2
	Destructive	980 m/s^2	980 m/s^2	980 m/s^2
Ambient	Temperature	-40~85 ℃	-40~85 ℃	-40~85 ℃
	Humidity	5~85% RH	5~85% RH	5~85% RH
Dimensions T x W x H (mm)		6.2 x 78.8 x 103	6.2 x 78.8 x 103	6.2 x 78.8 x 103
Wire range (AWG / mm^2)		20-16 / 0.5-1.5	20-16 / 0.5-1.5	20-16 / 0.5-1.5
Connection method		Spring clamp	Spring clamp	Spring clamp
Rated torque (N-m)		-	-	-

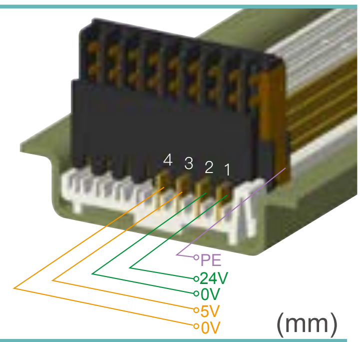
Accessories Part No.

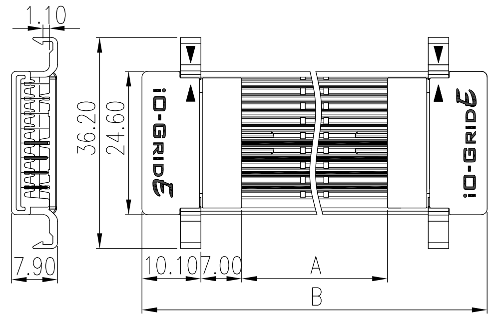
	RER-24-4A	RER-110-5B	RER-230-6B
Insertion bridge (Plug-in)	0149-4S-20	0149-4S-20	0149-4S-20
DIN Rail	TS-35 | TS-35/15	TS-35 | TS-35/15	TS-35 | TS-35/15
Screwdriver	0.4 x 2.5 mm	0.4 x 2.5 mm	0.4 x 2.5 mm
End Brackets	SS4N	SS4N	SS4N

Accessories

Standard Bus

BS-0X1234RE

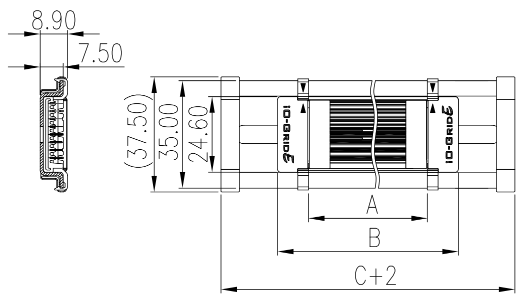




(mm)

Part Number	A	B
BS-071234RE	61	95.2
BS-001234RE	91	125.2
BS-011234RE	121	155.2
BS-021234RE	171	205.2
BS-031234RE	221	255.2
BS-041234RE	271	305.2
BS-051234RE	331	365.2

BS-7XX-1234RE

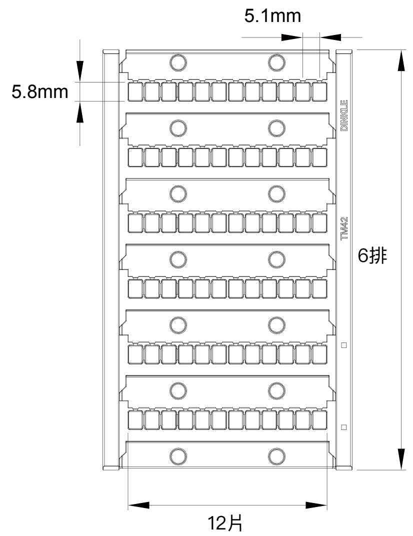


(mm)

Part Number	A	B	C
BS-740-1234RE	61	95.2	200
BS-700-1234RE	91	125.2	200
BS-701-1234RE	121	155.2	200
BS-702-1234RE	171	205.2	300
BS-703-1234RE	221	255.2	300
BS-704-1234RE	271	305.2	400
BS-705-1234RE	331	365.2	400

Marking label

TM42W

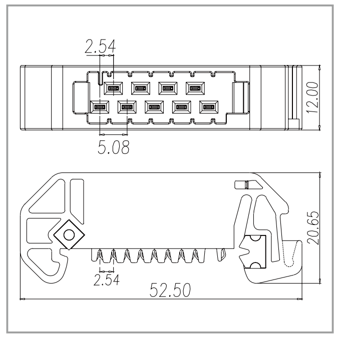


If there are any marker requirements, please refer to Dinkle's official website for more information of D-Thermo, the thermal transfer printer.

Bus Accessories

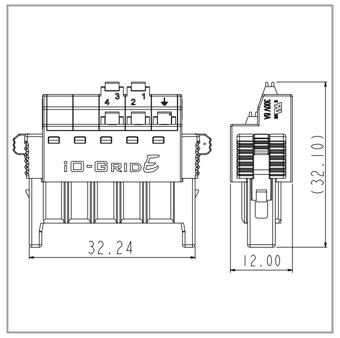
Adaptor Socket BS-210

Number of channels	9
Rated voltage	150V
Rated current	8A
Rated withstand voltage	1600V
Applied temperature	-40°C~+105°C



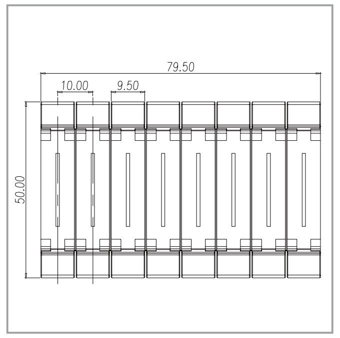
Adaptor Plug BS-212

Number of channels	5
Rated voltage	150V
Rated current	8A
Rated withstand voltage	1600V
Applied temperature	-40°C~+105°C
Wire range (IEC/UL)	0.2~1.5mm^2 / AWG 28~16



Bus cover BS-C028

Applied temperature	-40°C~+105°C



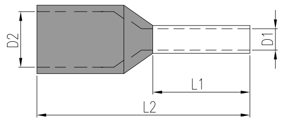
Wire Harness 2+2 (24V)

Part Number	A
BS-WR00401	0.25 m
BS-WR00402	0.5 m
BS-WR00403	1 m
BS-WR00404	2 m

Wire Harness 4+4 (24V+5V)

Part Number	A
BS-WR00501	0.25 m
BS-WR00502	0.4 m

Wire Ferrules



Unit:mm

Part No.	Wire Range		Dimension				Package (pcs)		DIN Color
	AWG	mm^2	D1	D2	L1	L2	bag	box	
DN00206D	24	0.2	0.75	1.9	6	10	1,000	10,000	● Light Blue
DN00208D					8	12	1,000	10,000	
DN00306D	22	0.34	0.8	1.9	6	10	1,000	10,000	● Turouise
DN00308D					8	12	1,000	10,000	
DN00506D	20	0.5	1	2.6	6	12	500	5,000	○ White
DN00508D					8	14	500	5,000	
DN00510D					10	16	500	4,000	
DN00706D	18	0.75	1.2	2.8	6	12	500	4,000	● Grey
DN00708D					8	14	500	4,000	
DN00710D					10	16	500	4,000	
DN00712D					12	18	500	4,000	
DN01006D		1	1.4	3	6	12	500	3,000	● Red
DN01008D					8	14	500	3,000	
DN01010D					10	16	500	3,000	
DN01012D					12	18	500	3,000	
DN01508D	16	1.5	1.7	3.5	8	14	500	2,000	● Black
DN01510D					10	16	500	2,000	
DN01512D					12	18	500	2,000	
DN01518D					18	24	500	2,000	

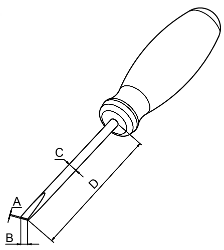
Tools

Note:
The wire diameter of the table is determined according to UL486E, IEC998-1 and IEC947-7. Please refer to the table to select suitable ferrules. All recommended ferrules in this catalogue are in accordance with this table.

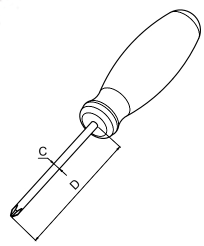
DNT13-0101
28-7 AWG
0.08-10 mm²

DNT04-2010A
20~10 AWG
0.6-5 mm²

Slotted Screwdriver



Phillips Screwdriver



Technica Data	Slotted screwdriver				Phillips screwdriver			
Part number	DNT11-0102	DNT11-0107	DNT11-0109	DNT11-0111	DNT11-0201	DNT11-0202	DNT11-0205	DNT11-0208
Size	2.5 X 75 mm	3.5 X 100 mm	4.0 X 100 mm	5.5 X 150 mm	#0 X 60	#1 X 80	#2 X 100	#3 X 150
A	2.5	3.5	4.0	5.0	-	-	-	-
B	0.4	0.6	0.8	1.0	-	-	-	-
C	2.5	3.5	4.0	5.0	3.0	5.0	6.0	8.0
D	75	100	100	150	60	80	100	150
E	21.6	21.6	21.6	27.2	21.6	27.7	33	37.5
F	70	70	70	90	70	90	108	122
Package	12	12	12	12	12	12	12	6