DAUDIN

Delight Through Connections

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YouTube

MAR./2022

iO-GRID M

Remote I/O

DAUDIN CO., LTD.

IC-02.4

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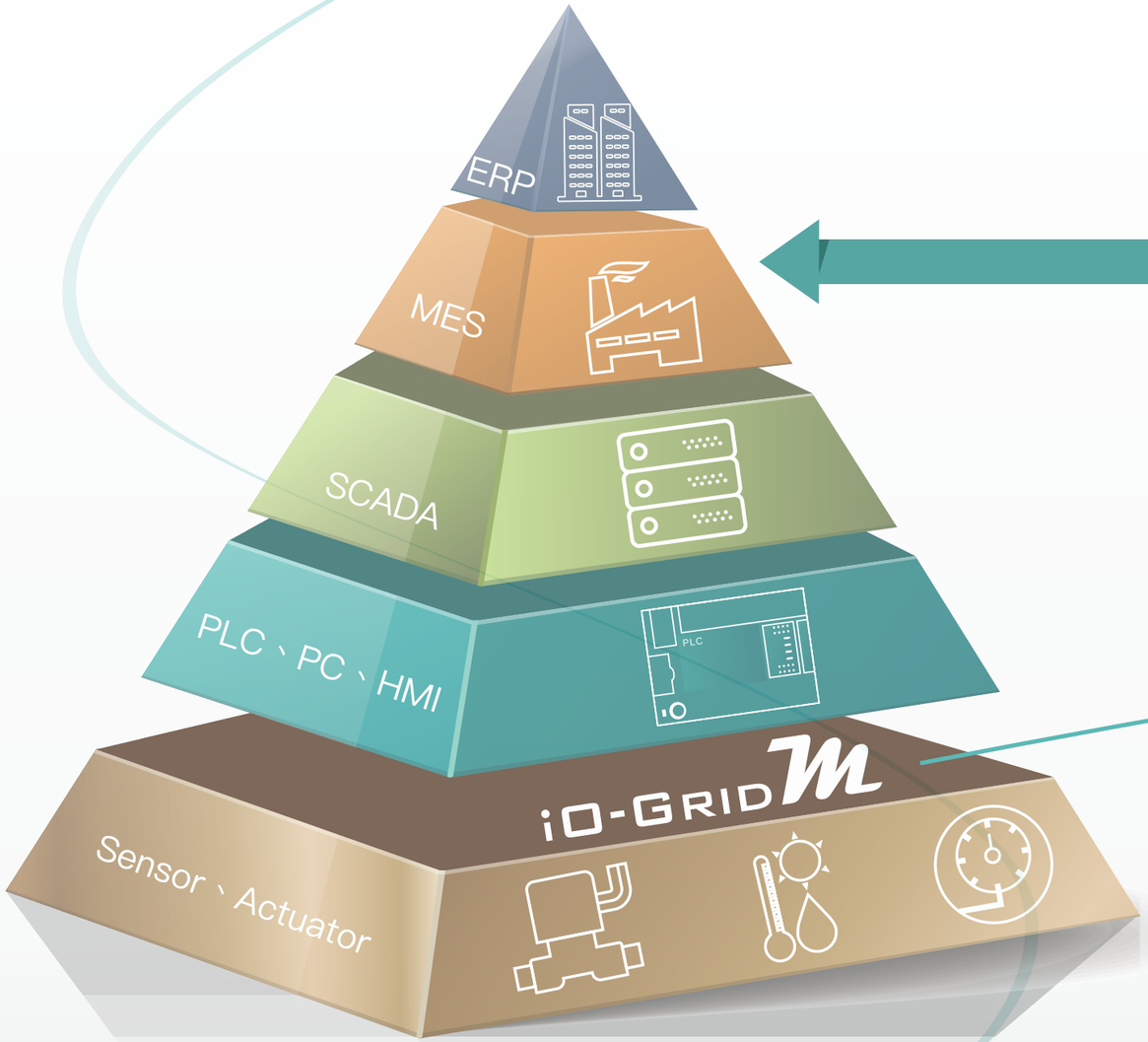


Data Collection and Analysis for Industrial Production

Seamless Connection Between Control and Field Level

Application Area

- General Machinery
- Timber Processing
- Plastic Machinery
- Packaging Machinery
- Forming Process, Steel Plate Processing
- Processing Machinery
- CNC Machining
- Tire and Rubber Industry
- Printing and Paper Industry
- Wire, Cable and Pipe Industry
- Textile Industry
- Precision Instrument
- Transportation Logistics
- Handling and Assembly Technology
- Robotics
- Building Automation
- Smart City
- Wind Power
- Solar Energy
- Energy Industry
- Wastewater Treatment
- Biotechnology
- Food Industry
- Automobile Industry
- Semiconductor Manufacturing
- Medical Engineering
- Smart Agriculture

Industrial Applications

First Step Towards Industrialization

- Large volume of data collection for Industry 4.0 can be effortlessly integrated
- Designed for Modbus Protocol, compatible with various types of controllers (i.e., PLC, IPC, etc.…)
- Wide selection of function modules to satisfy any industrial field applications
- Fast assembly, simple operation, and improved system efficiency
- EN 61000-6-2 / EN 61000-6-4, IEC / EN / UL 61010-1, IEC / EN / UL 61010-2-201 Standards

Enhanced Expansion Capability

- Given the different environmental requirements, various function modules can be flexibility configured
- Each master station can connect up to 247 slave stations (approximately 4000 points)
- Modules from only 12 mm wide, provides great aesthetic and organization in panels
- Reduce 70% wiring time and 60% wiring materials
- Easy recognition of module ID and status, improving maintenance efficiency

iO-GRID M Product Description

Gateway Module

Installed in iO-GRID M systems for Modbus TCP applications. This module includes Ethernet ports, up to four RS485 ports, and LED indicators.
Gateway Module utilizes Modbus TCP protocol to support two-way communication flow of data between iO-GRID M system and the controller.

iO-GRID Power Supply

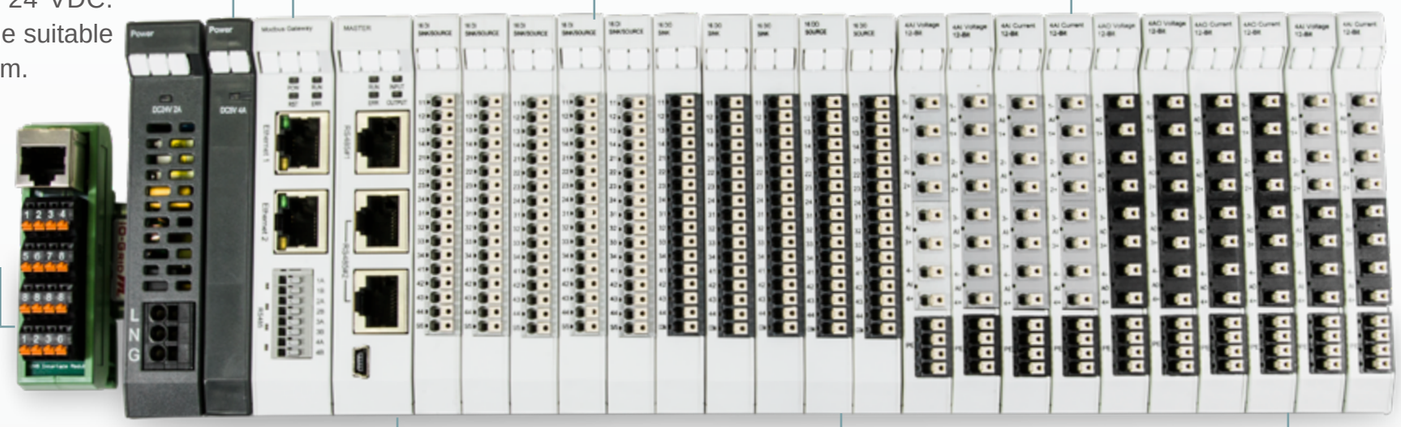
iO-GRID Power Supply converts the standard 100-240 VAC to a stable low voltage 24 VDC. Then from 24 VDC to 5 VDC, the voltage suitable for all the modules in iO-GRID system.

Power Conversion

- **100-240 VAC to 24 VDC**
- **24 VDC to 5 VDC**

RJ45 Interface Module

Utilizes Push-In Design terminal blocks to increase the connectivity efficiency



Master Module

iO-GRID M system's Master Module is quick to install and contains simple operation features. The controller only needs to send the commands to the Master Module, and the Master Module can efficiently relay the instructions to the I/O modules.

Master Module contains three sets of RS485 ports, one is used independently, and the other two are connected in tandem.

LED indicator to monitor the operational status of the system.

Mini USB port to setup the system settings.

Digital Input Module

iO-GRID M system supports both sinking and sourcing sensors and switches. Every module contains 16 channels, and each channel includes a LED indicator.

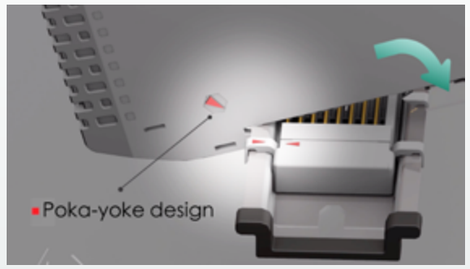
Analog Input Module

Includes voltage and current type modules, satisfying the industrial automation requirements for various meters, analog sensors and other analog signal applications.
Every module contains 4 channels, and each channel includes a LED indicator.

iO-GRID M Terminal Block

The terminal block utilizes PID (Push-In Design) connectivity, allowing a tool free installation, neat and organized wiring aesthetic, and maximum connection stability.

iO-GRID M Simple to Install



Digital Output Module

iO-GRID M system user can choose between the modules of sinking or sourcing, depending on the circuit requirement.

Every channel includes a LED indicator.

Analog Output Module

Includes voltage and current type modules for various meter.
Every module contains 4 channels, and each channel includes a LED indicator and grounding feature.

Power Supply Module

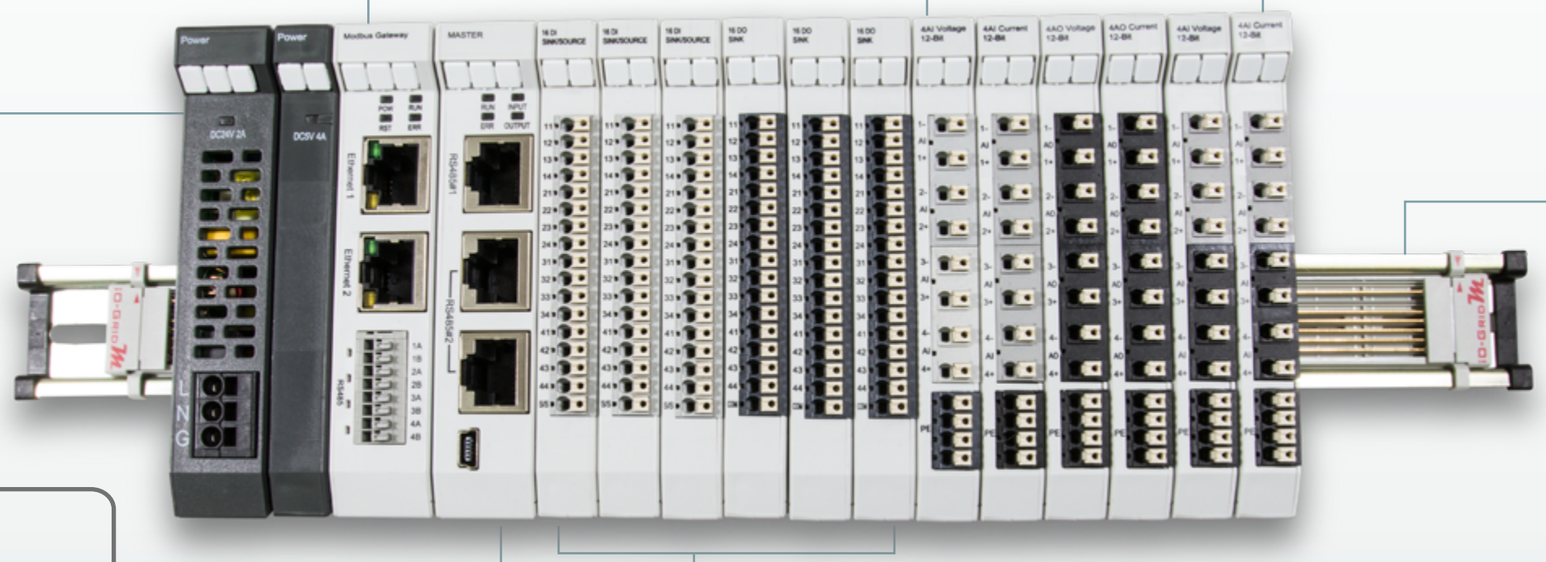
For more detail, see Page 10

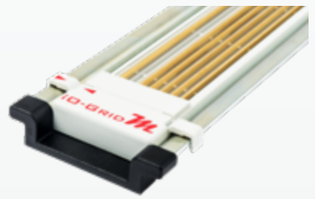
Gateway Module

For Modbus TCP application.
For more detail, see Page 12

Analog I/O Module

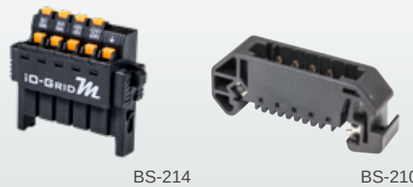
For more detail, see Page 16-21





Dinkle Bus Plate

For more detail, see Page 27

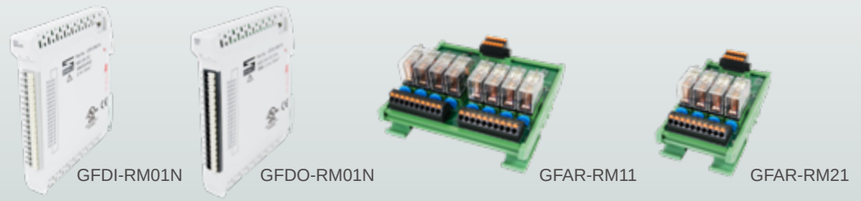


Adaptor Module

For Relay Module or third-party power supply.
For more detail, see Page 28

Master Module

For more detail, see Page 13



Digital I/O Module

For more detail, see Page 14, 15 and 24

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 ± 3%
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 voltage protection	**Overvoltage Protection**	Clamping protection
Overvoltage	30~34 VDC	**Overvoltage**	Clamping on 6.5 VDC~6.7 VDC
General Data		**General Data**	
Dimensions W*D*H	20 x 100 x 97 mm	**Dimensions W*D*H**	12 x 100 x 96 mm
Weight	126 g	**Weight**	68 g
Operating Temperature	-20...+60°C	**Operating Temperature**	-20...+60°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
Certification	UL, CE	**Certification**	UL, CE
Wire Range (IEC/UL)	$0.2mm^2$ ~ $2.5mm^2$ / AWG 26 ~ 12		
Wire 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	
Indicator	LED for System status * 6	
Serial	RS485 / RS422 / RS232 * 1	
Ext. Power Supply	5 VDC	
Current Draw	Max. 1A@5 VDC	
General Data		
Dimensions W*D*H	40 x 100 x 97 mm	
Weight	169 g	
Operating Temperature	0...+60°C	
Storage Temperature	-20...+85°C	
Relative Humidity	RH 95%, non-condensing	
Certification	CE	
Wiring Range(IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	
Wiring Ferrules	DN00510D DN00710D	

Gateway Module

GFGW-RM01N

GFGW-RM02N

Technical Data		
Module Type	Modbus TCP Gateway	Modbus TCP Gateway
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	400 mA @ 5 VDC	400 mA @ 5 VDC
Number Port	Ethernet*2 / RS485*4	Ethernet*2 / RS485*1
Ethernet Interface	RJ45*2	RJ45*2
Serial Interface	PID Terminal Blocks	RS485 via Dinkle Bus
Protocol	Modbus TCP / RTU	Modbus TCP / RTU
General Data		
Dimensions W*D*H	20 x 100 x 97 mm	20 x 100 x 97 mm
Weight	84 g	79 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	c UL us LISTED CE	c UL us LISTED CE
Wire Range (IEC/UL)	$0.2mm^2$ ~ $0.5mm^2$ / AWG 28 ~ 20	--
Wire Ferrules	DN00510D	--

Master Module

GFMS-RM01N

GFMS-RM01S

Technical Data		
Module Type	Master RS485	Master RS485
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Max. Expansion Modules	247	247
Current Draw	48 mA @ 5 VDC	48 mA @ 5 VDC
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Interface Connector	RJ45	RJ45
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	20 x 100 x 97 mm	20 x 100 x 97 mm
Weight	84 g	70 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	c UL us LISTED CE	c UL us LISTED CE

Digital Input Module

GFDI-RM01N

Technical Data		
Number Of Inputs	16	
Power Supply	5 VDC via Dinkle Bus	
Current Draw	35 mA @ 5 VDC	
Voltage Category	24 VDC	
Sink / Source	Sink / Sourc	
On-State Signal Voltage	15...30 VDC	
Off-State Signal Voltage	0...10 VDC	
Interface	RS485 via Dinkle Bus	
Communication Data		
Protocol	Modbus RTU	
Format	N, 8, 1	
Baud Rate Selectable	1200 to 1.5 Mbps	
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	
Weight	60 g	
Operating Temperature	-10...+60°C	
Storage Temperature	-25...+85°C	
Relative Humidity	RH 95%, non-condensing	
Altitude Limit	< 2000 m	
Ingress Protection(IP)	IP 20	
Pollution Severity	II	
Certification		
Wire Range (IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	
Wire Ferrules	DN00510D DN00710D	

Digital Output Module

	GFDO-RM01N	**GFDO-RM02N**
Technical Data		
Number Of Outputs	16	16
Load Voltage	24 VDC (±10%)	24 VDC (±10%)
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	135 mA @ 5 VDC	135 mA @ 5 VDC
Load Specification	Ohmic, lamp load	Ohmic, lamp load
Sink / Source	Sink	Source
Max. Output Current	0.5 A per channel	0.5 A per channel
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	69 g	69 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification		
Wire Range (IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

Analog Input Module

	GFAI-RM10	GFAI-RM11
Technical Data		
Number Of inputs	4	4
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	<105 mA @ 5 VDC	<105 mA @ 5 VDC
Resolution	12 bit	12 bit
Input Type	Voltage ±10 VDC	Voltage 0…10 VDC
Input	Differential	Differential
Accuracy	±0.1%	±0.1%
Input Impedance	400 kΩ, typical	400 kΩ, typical
Sample Rate	500 per second	500 per second
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	61 g	61 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	UL CE	UL CE
Wire Range (IEC/UL)	0.2mm^2 ~ 1.5mm^2 / AWG 28 ~ 16	0.2mm^2 ~ 1.5mm^2 / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

Analog Input Module

	GFAI-RM20	GFAI-RM21
Technical Data		
Number Of Inputs	4	4
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	<105 mA @ 5 VDC	<105 mA @ 5 VDC
Resolution	12 bit	12 bit
Input Type	Current 0...20 mA	Current 4...20 mA
Input	Differential	Differential
Accuracy	±0.1%	±0.1%
Input Impedance	100 Ω, typical	100 Ω, typical
Sample Rate	500 per second	500 per second
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	61 g	61 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	UL CE	UL CE
Wire Range (IEC/UL)	0.2mm^2 ~ 1.5mm^2 / AWG 28 ~ 16	0.2mm^2 ~ 1.5mm^2 / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

Analog Output Module

GFAO-RM10

GFAO-RM11

Technical Data		
Number Of Outputs	4	4
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	<235 mA @ 5 VDC	<235 mA @ 5 VDC
Resolution	12 bit	12 bit
Output Type	Voltage ±10 VDC	Voltage 0…10 VDC
Accuracy	±0.1%	±0.1%
Output Impedance	>2 KΩ	>2 KΩ
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	61 g	61 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	UL, CE	UL, CE
Wire Range (IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

Analog Output Module

GFAO-RM20

GFAO-RM21

Technical Data		
Number Of Outputs	4	4
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	<340 mA @ 5 VDC	<340 mA @ 5 VDC
Resolution	12 bit	12 bit
Output Type	Current 0...20 mA	Current 4...20 mA
Accuracy	±0.1%	±0.1%
Output Impedance	<500 Ω	<500 Ω
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	61 g	61 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	UL, CE	UL, CE
Wire Range (IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

Analog Input/Analog Output Module

GFAX-RM10

GFAX-RM11

Technical Data		
Number Of Inputs/Outputs	2 inputs / 2 outputs	2 inputs / 2 outputs
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	<140 mA @ 5 VDC	<140 mA @ 5 VDC
Resolution	12 bit	12 bit
Input / Output Type	Voltage ±10V	Voltage 0...10V
Input	Differential	Differential
Accuracy	±0.1%	±0.1%
Input Impedance	400 kΩ, typical	400 kΩ, typical
Output Impedance	>2 KΩ	>2 KΩ
Sample Rate	500 per second	500 per second
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	61 g	61 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification		
Wire Range (IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

Analog Input/Analog Output Module

GFAX-RM20

GFAX-RM21

Technical Data		
Number Of Inputs/Outputs	2 inputs / 2 outputs	2 inputs / 2 outputs
Power Supply	5 VDC via Dinkle Bus	5 VDC via Dinkle Bus
Current Draw	<240 mA @ 5 VDC	<240 mA @ 5 VDC
Resolution	12 bit	12 bit
Input / Output Type	Current 0...20 mA	Current 4...20 mA
Input	Differential	Differential
Accuracy	±0.1%	±0.1%
Input Impedance	100 Ω, typical	100 Ω, typical
Output Impedance	<500 Ω	<500 Ω
Sample Rate	500 per second	500 per second
Interface	RS485 via Dinkle Bus	RS485 via Dinkle Bus
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	12 x 100 x 97 mm
Weight	61 g	61 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification		
Wire Range (IEC/UL)	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16	$0.2mm^2$ ~ $1.5mm^2$ / AWG 28 ~ 16
Wire Ferrules	DN00510D DN00710D	DN00510D DN00710D

RTD Module

GFRT-RM01

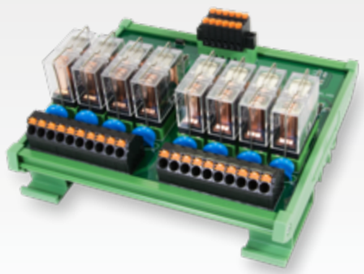
Technical Data		
Number Of Outputs	4	
Power Supply	5 VDC via Dinkle Bus	
Current Draw	100 mA@5 VDC	
Sensor Connector	2/3/4 wire	
Resolution	16 bit	
Accuracy	±0.1% FSR	
Conversion Time	100ms per channel	
Type	Pt50, Pt100, Pt200, Pt500 (-200°C~850°C) Pt1000 (-200°C~300°C) Ni100 (-60°C~180°C) Ni120 (-80°C~260°C)	
Diagnostic	Sensor Open or Range Over, then Conversion Data=07FFF(32767)	
Interface	RS485 via Dinkle Bus	
Communication Data		
Protocol	Modbus RTU	
Format	N, 8, 1	
Baud Rate Selectable	1200 to1.5 Mbps	
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	
Weight	65 g	
Operating Temperature	-10...+60°C	
Storage Temperature	-25…+85°C	
Relative Humidity	RH 95%, non-condensing	
Altitude Limit	< 2000 m	
Ingress Protection (IP)	IP 20	
Pollution Severity	II	
Certification	cULus CE	
Wire Range (IEC/UL)	0.2 mm^2 ~ 1.5 mm^2 / AWG 28~16	
Wire Ferrules	DN00510D DN00710D	

Counter Module

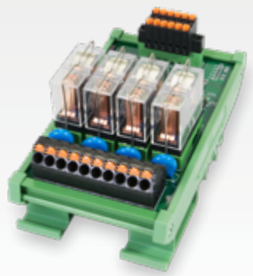
GFDI-RM02N

Technical Data		
Number Of Inputs	4	
Power Supply	5 VDC via Dinkle Bus	
Current Draw	37mA@5 VDC	
Frequency	Max. 100Hz	
On-State Signal Voltage	15…30 VDC	
Off-State Signal Voltage	0…10 VDC	
Interface	RS485 via Dinkle Bus	
Communication		
Protocol	Modbus RTU	
Format	N, 8, 1	
Baud Rate Selectable	1200 to 1.5 Mbps	
General Data		
Dimensions W*D*H	12 x 100 x 97 mm	
Weight	60 g	
Operating Temperature	-10...+60°C	
Storage Temperature	-25…+85°C	
Relative Humidity	RH 95%, non-condensing	
Altitude Limit	< 2000 m	
Ingress Protection (IP)	IP 20	
Pollution Severity	II	
Certification	cULus CE	
Wire Range (IEC/UL)	0.2 mm^2 ~ 1.5 mm^2 / AWG 28~16	
Wire Ferrules	DN00510D DN00710D	

Relay Module



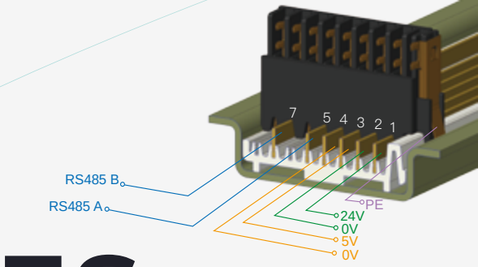
GFAR-RM11

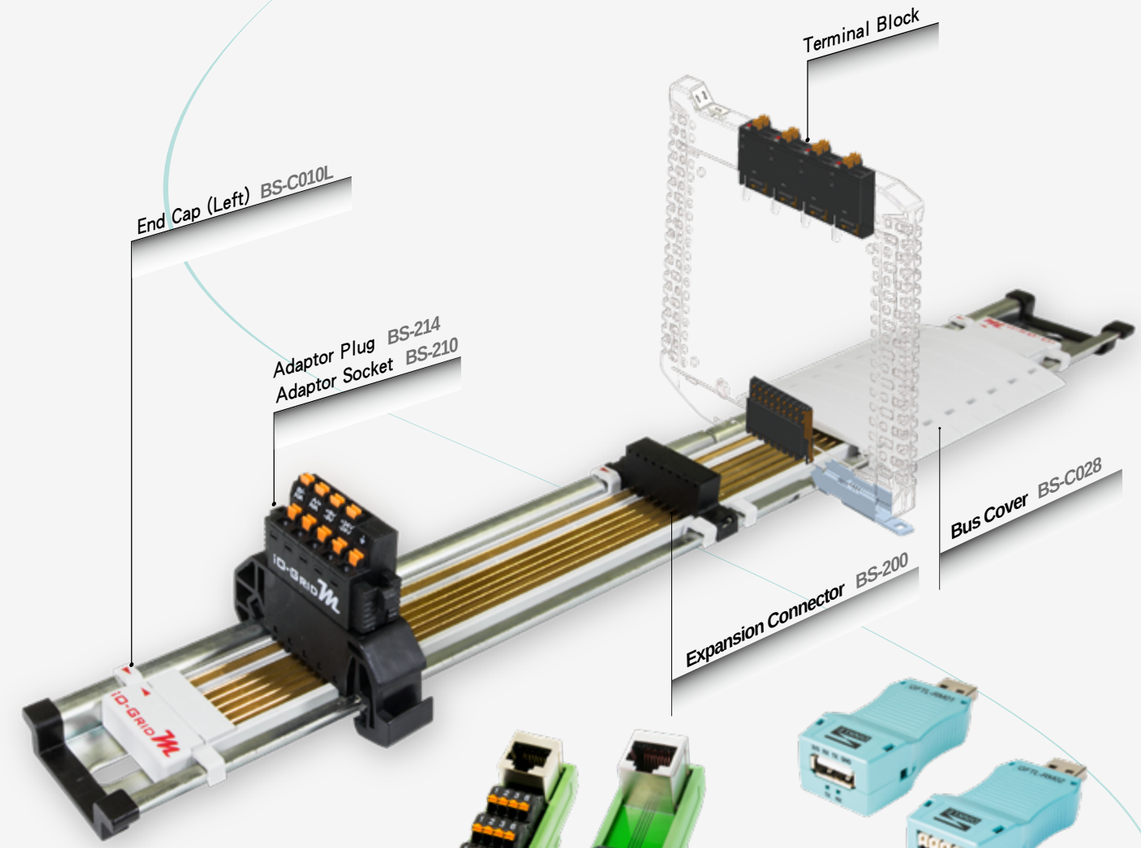


GFAR-RM21

Technical Data		
Number Of Outputs	8	4
Power Supply	24 VDC	24 VDC
Current Draw	<220 mA @ 24 VDC	<109 mA @ 24 VDC
Max. Switching Voltage	250 VAC / 30 VDC	250 VAC / 30 VDC
Max. Switching Current	10 A	10 A
Operation Time	Max 10 ms	Max 10 ms
Release Time	Max 5 ms	Max 5 ms
Communication Data		
Protocol	Modbus RTU	Modbus RTU
Format	N, 8, 1	N, 8, 1
Baud Rate Selectable	1200 to 1.5 Mbps	1200 to 1.5 Mbps
General Data		
Dimensions W*D*H	134 x 121.8 x 60.5 mm	68 x 121.8 x 60.5 mm
Weight	358 g	195 g
Operating Temperature	-10...+60°C	-10...+60°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
Pollution Severity	II	II
Certification	CE	CE
Wire Range (IEC/UL)	0.2 mm^2 ~ 1.5 mm^2 / AWG 24 ~ 16	0.2 mm^2 ~ 1.5 mm^2 / AWG 24 ~ 16
Wire Ferrules	DN00508D DN00708D DN01008D	DN00508D DN00708D DN01008D
Wire Range (IEC/UL)	0.2 mm^2~2.5 mm^2 / AWG 24~12	0.2 mm^2~2.5 mm^2 / AWG 24~12
Wire Ferrules	DN00508D DN00708D DN01008D DN01510D	DN00508D DN00708D DN01008D DN01510D

iO-Grid M ACCESSORIES





Wire Harness 6+6

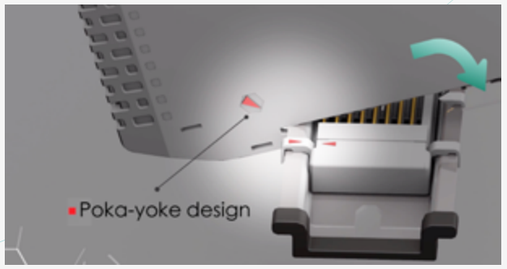
Wire Harness 3+3

Wire Harness 5+5

Marking Label

Interface Module

USB Converter



USB Converter

GFTL-RM01

iO-GRID M Setup

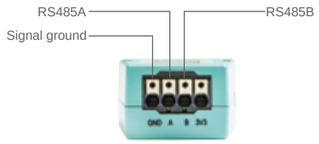
USB / RS232

GFTL-RM02

RS485 communication

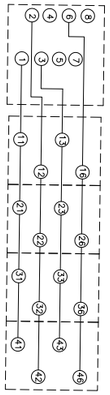
USB / RS485

Wire range (IEC/UL)	0.2 ~ 1.5mm² / AWG 28 ~ 16
Wire ferrules	DN00510D
	DN00710D



Interface Module

0170-0102

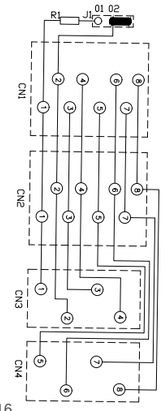


Terminal block

Ethernet RJ45 female connector

Wire range (IEC/UL):0.14 ~ 1.5mm² / AWG 28 ~ 16

0170-0103



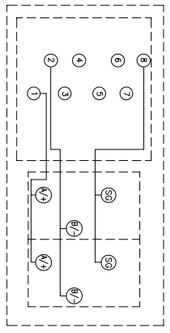
Terminal block

Ethernet RJ45 female connector

Wire range (IEC/UL):0.14 ~ 1.5mm² / AWG 28 ~ 16

Interface Module

0170-0104



Terminal block

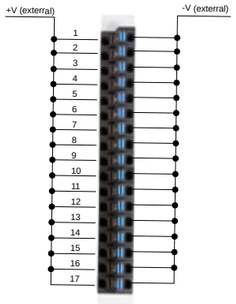
8 pin RJ45 female connector

RS485 Interface

Wire range (IEC/UL):0.14 ~ 1.5mm² / AWG 28 ~ 16

Power Distribution Module

GFPB-0102



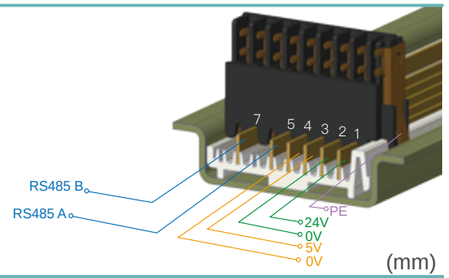
24VDC power distribution

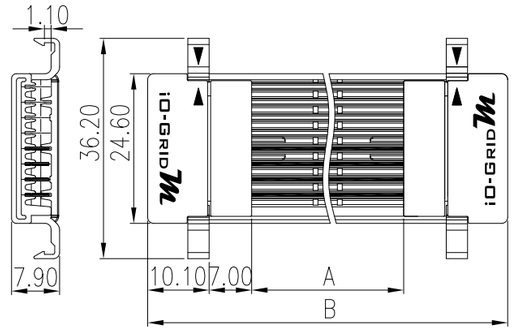
External power supply

Wire range (IEC/UL):0.2 ~ 1.5mm² / AWG 28 ~ 16

Standard Bus

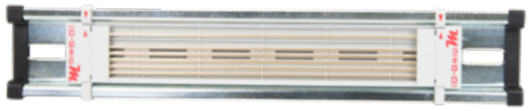
BS-0X123457RM



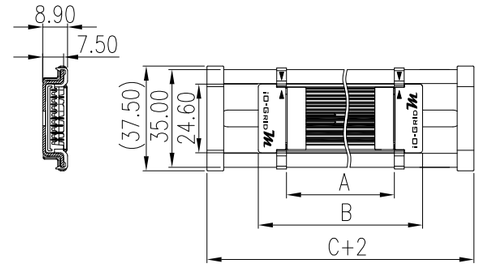


(mm)

Part No.	A	B
BS-07123457RM	61	95.2
BS-00123457RM	91	125.2
BS-01123457RM	121	155.2
BS-02123457RM	171	205.2
BS-03123457RM	221	255.2
BS-04123457RM	271	305.2
BS-05123457RM	331	365.2



BS-7XX-123457RM

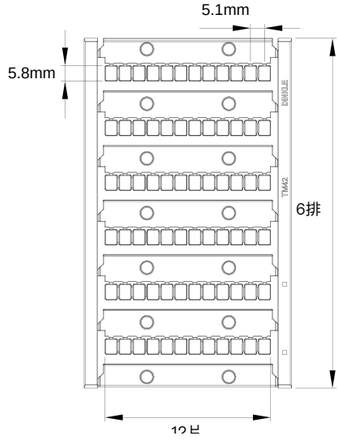


(mm)

Part No.	A	B	C
BS-740-123457RM	61	95.2	200
BS-700-123457RM	91	125.2	200
BS-701-123457RM	121	155.2	200
BS-702-123457RM	171	205.2	300
BS-703-123457RM	221	255.2	300
BS-704-123457RM	271	305.2	400
BS-705-123457RM	331	365.2	400

Marking label

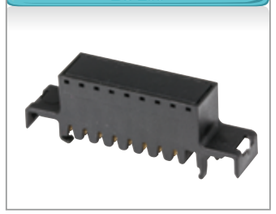
TM42W



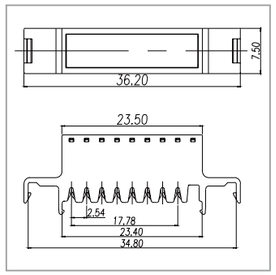
If there are any marker requirements, please refer to Dinkle's official website for more information of D-Thermo, the thermal transfer printer.

Bus Accessories

Expansion Connector
BS-200

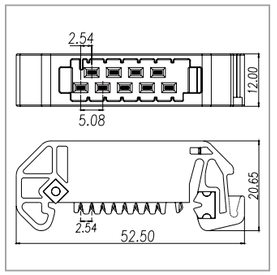


Number of channels	8
pitch(mm)	2.54
Rated voltage	12V~150V
Rated current	Max.8A
Rated withstand voltage	1600V
Applied temperature	-40°C~+105°C



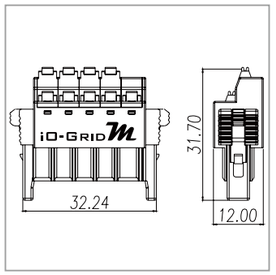
Adaptor Socket
BS-210

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



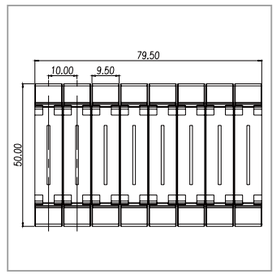
Adaptor Plug
BS-214

Number of channels	9
Rated voltage	150V
Rated current	8A
Rated withstand voltage	1600V
Applied temperature	-40°C~+105°C
Wire range (IEC/UL)	0.2~1.5mm² / AWG 28~16



Bus cover
BS-C028

Applied temperature	-40°C~+105°C



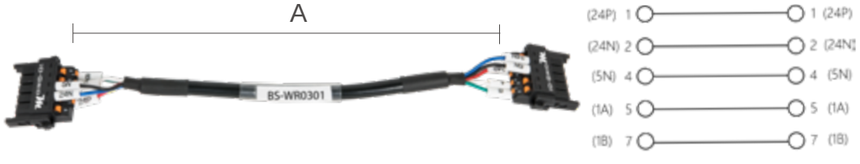
Wire Harness 6+6

Part No.	A
BS-WR00101	0.25 m
BS-WR00102	0.4 m

Wire Harness 3+3

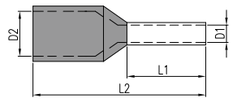
Part No.	A
BS-WR00201	0.25 m
BS-WR00202	0.50 m
BS-WR00203	1 m
BS-WR00204	1.5 m
BS-WR00205	2 m

Wire Harness 5+5



Part No.	A
BS-WR00301	0.25 m
BS-WR00302	0.5 m
BS-WR00303	1 m
BS-WR00304	1.5 m
BS-WR00305	2m

Wire Ferrules



Unit:mm

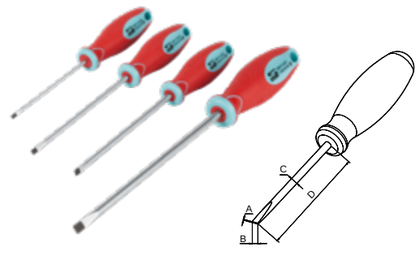
Part No.	Wire Range AWG	Wire Range mm²	Dimension D1	Dimension D2	Dimension L1	Dimension L2	Package (pcs) bag	Package (pcs) box	DIN Color
DN00206D	24	0.2	0.75	1.9	6	10	1,000	10,000	Light Blue
DN00208D					8	12	1,000	10,000	
DN00306D	22	0.34	0.8	1.9	6	10	1,000	10,000	Turouise
DN00308D					8	12	1,000	10,000	
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	

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.

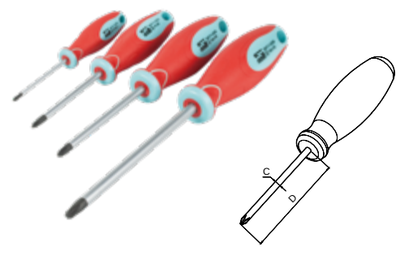
DNT13-0101
28-7 AWG
0.08-10 mm²

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

MEMO

DAUDIN Delight Through Connections

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DAUDIN Delight Through Connections

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DAUDIN Delight Through Connections

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DAUDIN Delight Through Connections

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