SDN PowerConnect™ Surface-Mount Panel

Item #: 1871026

Somfy Digital Network RS485

Overview:

The SDN PowerConnect™ Surface-Mount Panel is a Somfy Digital Network™ (SDN) bus distribution component used to add 10 isolated motor ports and two isolated device ports to an SDN bus segment. The isolated motor ports support up to 240 feet of power and data wiring to Somfy's range of low-voltage SDN motors. The in-wall or on-wall mountable enclosure offers easily accessible line and low-voltage areas for simplified installation. This product can be used in small SDN systems with two control devices and 10 individual motors as a stand-alone solution, as well as scale for larger SDN or animeo® IP systems.

Somfy Digital Network system overview:

Somfy Digital Network™ (SDN) is Somfy's intelligent wired shading network. An SDN system is comprised of bus distribution devices that create a network for user interfaces, motorized applications and sensors to be connected. SDN is scalable and suitable for both small and large projects. The same components are used whether an SDN system remains standalone, integrated into third-party automation systems, or with Somfy's animeo® IP automated total solar management system.

Technical specifications:

- Input: 120V AC, 7.2A
    230V AC, 4.2A
    277V AC, 2.7A
- Motor Output: 24V DC fused at 2.2A
- Power Consumption: Consumes 0 units on bus (Consumes power from internal power supplies). Each device port supports 1 device, up to 8 power units.
- Material: Powder coated steel enclosure
- Dimensions: Cover: 12" (W) x 12" (H)
    Enclosure: 12" (W) x 12" (H) x 4" (D)
- Maximum Wiring Distance
    - To motors:
        - Up to 240 ft. per motor port. Somfy requires the use of the SDN Low-voltage Motor Power and Data Cable, available in both Plenum (US: 9020127, Canada: 9020453) and Non-Plenum (US: 9020126, Canada: 9020452) versions
    - To devices:
        - Up to 200 ft. per device port
- Operating Temperature Range: Ambient temperature
- Shipping Weight: 12 lbs.
- Indoor use only

What's in the box:

- SDN PowerConnect™ Surface-Mount Panel
- (10) Low-voltage motor to panel connectors
- Device Adaptor
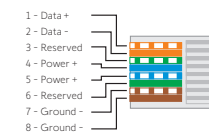- 10 female Weidmüller connectors

Features summary:

- Enables control of 10 RS485 DC motors per panel
- New mounting options add flexibility to installation
- Smaller form factor — approx. 50% smaller volume
- New 'Sequence' button allows for testing of motor wiring directly at the power panel
- Provides power to SDN Device Ports from internal power supplies (Add a Bus Power Supply when adding a Data Hub, Mini Data Hub, or other bus powered device connected to the Bus line.)
- 2 Device Ports isolated from SDN Bus Includes bus segment status LEDs for:
    - Power
    - Communication
    - End of line notification
    - Protects system components from mis-wire
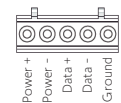- Can mount on-wall or in-wall (between studs)

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Optional accessories:

SDN Weidmüller 5-position Female Field Installable Connector	#9025113
SDN Weidmüller 5-position Male Field Installable Connector	#9020743
Drapery Adaptor for Power over Ethernet (PoE) Gateway	#9025012
SDN Irismo™ 24V Mini DC Control Enclosure Kit (with Drapery Cable)	#1870282
Concealed cover	#9800383

Cable pinouts:

SDN Input

Required conductors for SDN

1 - Data +
2 - Data -
3 - Reserved
4 - Power +
5 - Power +
6 - Reserved
7 - Ground -
8 - Ground -
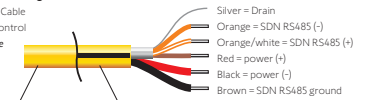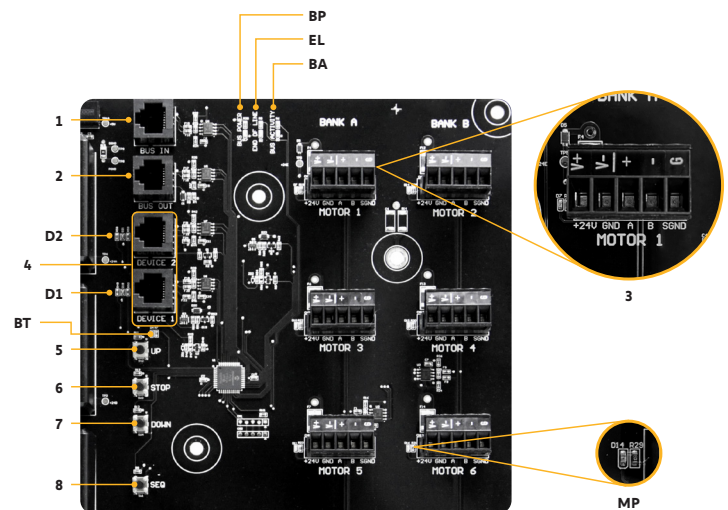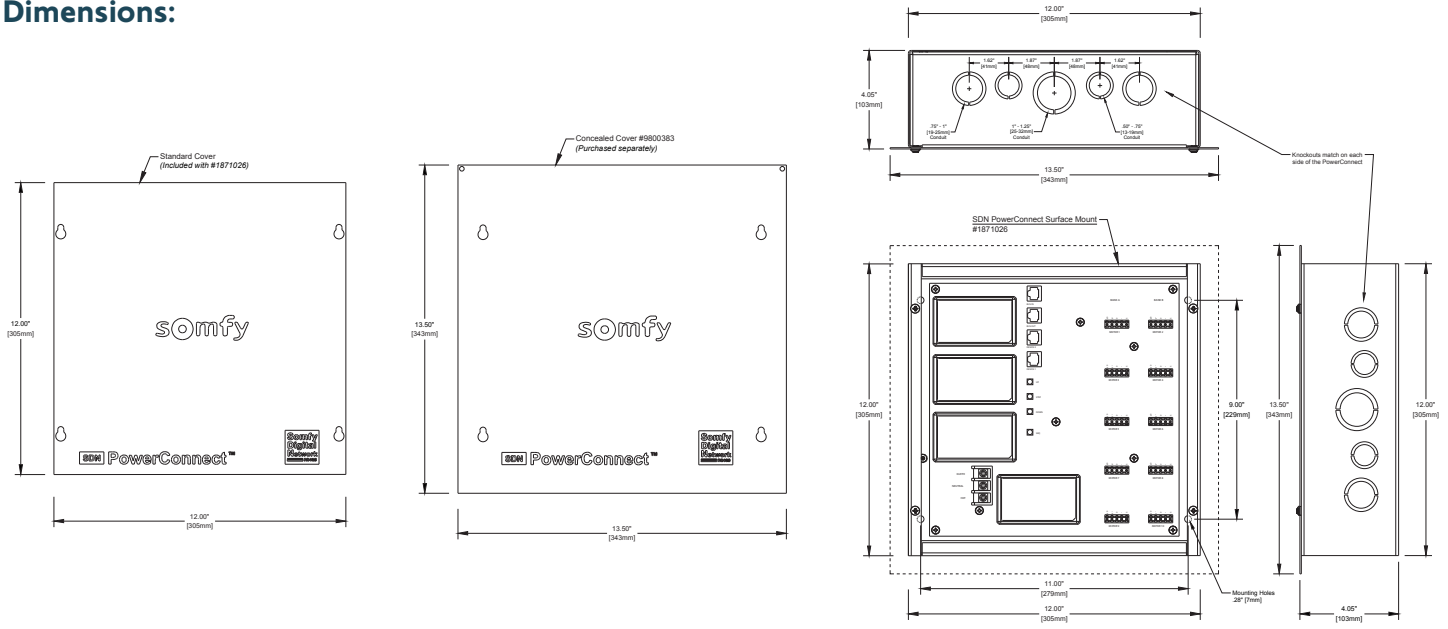
Motor Input

Power + / Power + / Data + / Data - / Ground

SDN Low-voltage Motor Power and Data Cable

Somfy SDN Low-voltage Motor Cable
Data and Power Cable
24V DC / SDN Control
5 conductor cable

Silver = Drain
Orange = SDN RS485 (-)
Orange/white = SDN RS485 (+)
Red = power (+)
Black = power (-)
Brown = SDN RS485 ground

Non-plenum Rated:
US: 9020126
Canada: 9020452

Plenum Rated:
US: 9020127
Canada: 9020453

Connections and indicators:

Inputs/Outputs		Description
1	SDN Bus Input	Input for bus signals
2	SDN Bus Output	Output for bus signals
3	Isolated Motor Port	10 low voltage motors to SDN network
4	Device Ports	Connect SDN Device to Power Panel (1 SDN Device per port. max. 200 ft. each)
5	UP Button	Moves motors UP
6	STOP Button	STOP motors
7	DOWN Button	Moves motors DOWN
8	SEQ Button	Moves motor sequentially UP/STOP/DOWN

LED Indicators				
Label	Element	Color	Function ON	Function OFF
D1	Device 1 LED	Yellow Green Red	Power (Green)	No power (Yellow) Power fault (Red)
D2	Device 2 LED	Yellow Green Red	Power (Green)	No power (Yellow) Power fault (Red)
EL	End of Line	Yellow	End of Bus	Not end of Bus
BP	Bus Power	Green	Bus is powered	Bus not powered
BA	Bus Activity	Green	Activity on Bus	No Bus activity
BT	Button Activity	Yellow	Switch pressed	Switch not pressed
MP	Motor Port Power	Green	Port powered	Port not powered

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Dimensions:

Standard Cover
(Included with #1871026)

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SDN PowerConnect™

12.00"
[305mm]

12.00"
[305mm]

Concealed Cover #9800383
(Purchased separately)

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SDN PowerConnect™

13.50"
[343mm]

13.50"
[343mm]

12.00"
[305mm]

4.05"
[103mm]

.62"
[41mm]

1.6"
[41mm]

1.8"
[46mm]

1.62"
[41mm]

.75" - 1"
[19-26mm]
Conduit

1" - 1.25"
[25-32mm]
Conduit

.50" - .75"
[13-19mm]
Conduit

13.50"
[343mm]

Knockouts match on each
side of the PowerConnect

SDN PowerConnect Surface Mount
#1871026

12.00"
[305mm]

9.00"
[229mm]

13.50"
[343mm]

12.00"
[305mm]

11.00"
[279mm]

12.00"
[305mm]

Mounting Holes
.28" [7mm]

4.05"
[103mm]

Best wiring practices:

The diagram shown below is meant for illustrative purposes to show the connections from product to product. This device could be used in other configurations than shown below. For specification information on individual products see related product information. Follow all SDN wiring standards for distance limitations.

- Adds 10 isolated motor ports and 2 isolated device ports to a system.
- Each device port supports 1 device, up to 8 power units
- Maximum 200 ft. per isolated device port.
- Motor wiring distance up to 240 ft per motor port. Somfy requires the use of the SDN Low-voltage Motor Power and Data Cable, available in both Plenum (US: 9020127, Canada: 9020453) and Non-Plenum (US: 9020126, Canada: 9020452) versions from Somfy.

NOTE: Provides power to SDN Device Ports from internal power supplies. Consumes power from internal power supplies. Add a Bus Power Supply when adding a Data Hub, Mini Data Hub, or other bus powered device connected to the Bus line.

Sonesse® 50
ULTRA RS485 DC

Irismo™ 35
Mini DC

SDN Irismo™
24V Mini DC
Control Enclosure Kit

Sonesse® 30
RS485 24V DC

MOTORS

SDN
PowerConnect™
Surface-Mount Panel

BUS IN

BUS OUT

BUS DISTRIBUTION

DecoFlex
Keypad

RTS
Receiver

RTS

RTS
Transmitter

USER INTERFACES

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www.somfypro.com

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