

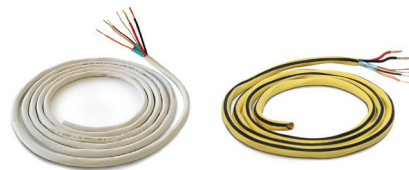


SDN Low-voltage Motor Power and Data Cable

USA Item #: 1049444 (Non-plenum rated), 1049445 (Plenum rated)

OVERVIEW

The SDN Low-voltage Motor Power and Data Cable is the power and communication backbone that connects low-voltage Somfy Digital Network™ (SDN) RS485 motors, including the Sonesse® ULTRA 50 DC RS485 motor and Sonesse® 30 RS485 motor, to Somfy's Power Panel for SDN. Within a single jacket, this cable includes (1) 14 AWG power pair, (1) 22 AWG stranded, twisted and shielded data triad and (1) 24 AWG drain wire for the most reliable data communication on the market. With this cable, motor wiring runs can reach up to 240 ft. This cable is offered in plenum rated and non-plenum rated versions.



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

Electrical Specifications	1049444	1049445
unit: 1000' spool		
22 AWG Data Triad		
Conductor DCR	16.6 Ω /1,000 ft.	15.7 Ω /1,000 ft.
Capacitance	12.5 pF/ft.	12 pF/ft.
Impedance	100 Ω	107 Ω
14 AWG Power Pair		
Conductor DCR	2.7 Ω /1,000 ft.	4.05 Ω /1,000 ft.
Max voltage	300V	
Max current	8A@77°F	
Cable diameter	0.284 in. (7.21 mm)	0.277 in. (7.04 mm)
Cable jacket	White	Yellow w/ black stripe
Cable jacket material	Polyvinyl Chloride(PVC)	Plenum Rated Polyvinyl Chloride(PVC)
Operating temperature	-4°F to 167°F (-20°C to 75°C)	32°F to 167°F (0°C to 75°C)
Weight	0.056 lb./ft. or 56 lbs./1,000 ft. roll	0.059 lb./ft. or 59 lbs./1,000 ft. roll

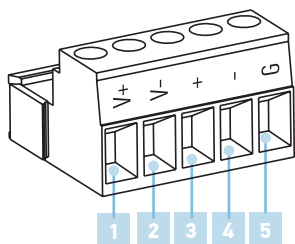
- **Cable type**
 - Twisted wire - non-shielded: 2 x 14 AWG 41-strand annealed bare copper conductors
 - Twisted and shielded 3 x 22 AWG 7-strand annealed bare copper conductors
 - 1 x 24 AWG:7 strand, tinned copper (drain)
- Shield type: 100% aluminum/poly shield foil
- Cable length per spool: 1000 ft.
- Ripcord: Nylon
- **Regulatory Certification(s)**
 - NEC rated CL3R or CL3P 75°C
 - EU RoHS-2 2011/65/EU compliant
 - UL13 compliant in accordance to NEC article 725

FEATURES SUMMARY

- Accommodate longer wiring distances with installation lengths up to 240 ft.
- Installation flexibility within plenum and non-plenum rated options
- Minimize ground noise produced by motors, switches or other electrical equipment
- Prevent signal corruption, damage to components connected to the bus and ground loops
- Protect against electrical line surges
- The only cable that meets the low-voltage SDN motor best practices
- UL certified



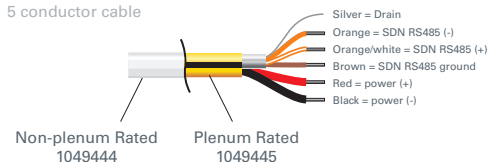
CONNECTIONS AND INDICATORS



ELEMENT	FUNCTION
1 Voltage/Power - positive	24V DC Power positive input
2 Voltage/Power - negative	24V DC Power negative input
3 SDN RS485 - positive	Data communication - positive
4 SDN RS485 - negative	Data communication - negative
5 SDN RS485 - ground	Data communication - ground

CABLE PINOUTS

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



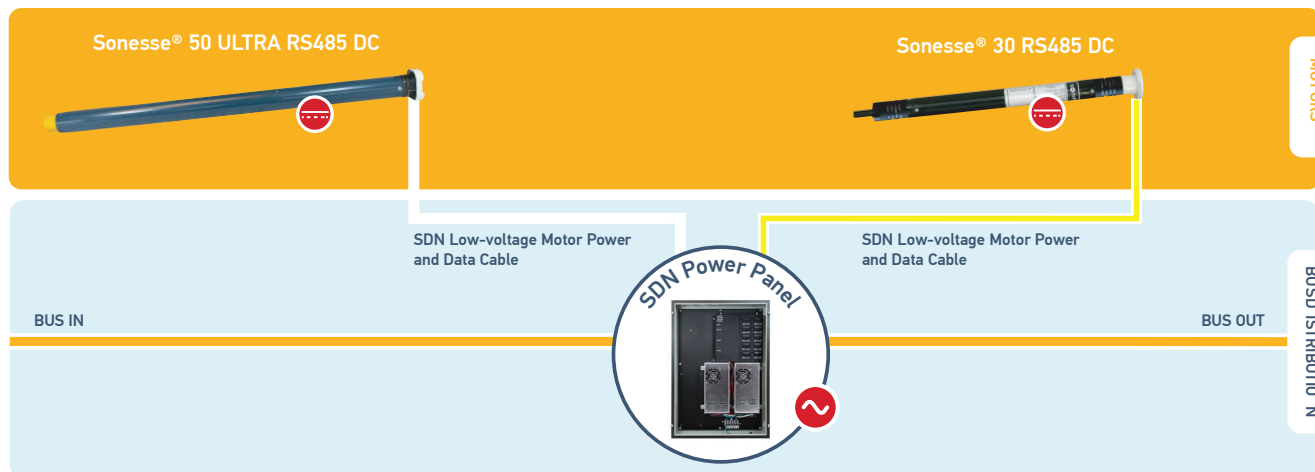
BEST WIRING PRACTICES

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.

Power Panel Use Case

Adds 10 isolated motor ports and 2 isolated device ports to a system.

Motor wiring distance up to 240 ft. per motor port. Somfy requires the use of the SDN Low-voltage Motor Power and Data Cable.



SDN Power over Ethernet(PoE) Use Case

- Control up to 4 low-voltage RS485 motors from an SDN PoE Gateway.
- When operating motors in a group, motors will cascade individually.
- Aligned operation available with Sonesse® 30 RS485 DC (maximum 2 motors).
- Total wiring between the network switch and SDN PoE Gateway should not exceed 300 ft. using Category 5e cable.
- Total wiring between the SDN PoE Gateway and all motors should not exceed 240 ft. when using the SDN low-voltage motor cable.
- Gateway connects to the SDN low-voltage motor cable using the 4 pin POE Gateway to motor adaptor cables.

