Specification

Built in power line type for CC-Link Ver.1.10 Type:PW110SBH

MITSUBISHI ELECTRIC
SYSTEM & SERVICE CO., LTD.

Note				
Revision	Drawn	Check	Design	Approved
Send to	Date	Dwg		
	15 Dec.,2020			
	Order	X903703D50043-E06		

1. SCOPE

This is specification which built in power line type for CC-Link Ver.1.10.
・PW110SBH

* The products described in this specification comply with the European RoHS2 directive.

2. APPLICABLE STANDARDS

UL 758 (AWM STYLE 2464)
CSA C22.2 No.210 (AWM)
TR-CU

3. SPECIFICATIONS

Item		Unit	Communication line	Power line
Number of insulated core wires		—	3	2
Conductor	Material	—	Annealed copper stranded wire for electricity	Annealed copper collective wire for electricity
	Conductor size	—	20AWG	0.75 ㎟(19AWG)
	Outer diameter	mm	Approx.0.96	Approx.1.1
Insulation	Material	—	Polyethylene foamed	Polyvinyl chloride
	Outer diameter	mm	Approx.2.36	Approx.2.3
Filler	Material	—	Polyethylene string	
Stranding	Construction	—	See the structural drawing	
Tape	Material	—	Aluminum-polyester laminated	
Shield	Material	—	Tin coated annealed copper braid	
Grounding wire	Material	—	Tin coated annealed copper(Insert non-stranded wire vertically)	
Inner Sheath	Material	—	polyvinyl chloride (Brown)	
	Outer diameter	mm	Approx.7.6	
Stranding	Construction	—	See the structural drawing	
Filler	Material	—	Blended yarn	
Tape	Material	—	Paper	
Sheath	Material	—	Oil resistant polyvinyl chloride(Brown)	
Overall diameter		mm	Approx.12.0	
Approximate weight		kg/km	145	
Electrical characteristics				
Conductor resistance (at20℃)		Ω/km	Under 34.5	Under 25.1
Insulation resistance		MΩ･km	Over 10000	Over 10(at20℃)
Withstand voltage		V for 1 minute	AC 2000	
Characteristic impedance	1MHz	Ω	110±15	
	5MHz	Ω	110±6	
Allowable current(*1)	at30℃	A		8
	at50℃			6
	at70℃			2.6
Operating temperature range		℃	-15 to 75 (To be free from condensation)	
Allowable tensile force		N	98	
Minimum bending radius		mm	50	

*1. Current value when laying one row in the air (when heat is sufficiently dissipated)

4. STRUCTURAL DRAWING