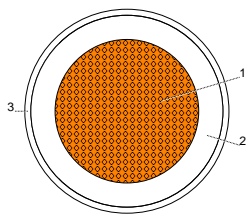


## TECHNICAL DATA SHEET LOW VOLTAGE THHN BUILDING WIRE

Cable Description:

12 AWG CU / PVC (THHN)

Design and Construction Data:		
Reference Manufacturing Standards		American Designation
Max. Permissible Continuous Conductor Temp	°C	105
Max. Conductor Short Circuit Temp for 5 Seconds	°C	150
Rated Voltage	V	600
Conductor Size	AWG	12
Number of wires per conductor		19
Wires Combination		Round Wires Unilay-Stranded
Insulation Material		Polyvinyl Chloride (PVC)
Nominal Insulation Thickness	mm	0.38
Insulation Color		WHITE
Outer Nylon Jacket		Polyamide Nylon
Approximate Wire Overall Diameter	mm	3.2
Electrical Data:		
Max Conductor DC resistance @ 20 °C	ohms/km	5.4300
Max Conductor AC resistance @ 105 °C	ohms/km	7.2440
Max Conductor Short Circuit Current @ 1 Second	kA	0.2639
Current Carry Capacity @ 30 °C Ambient Temperature <sup>(1)</sup>		
Single-Insulated Conductor		
Laid in free air	A	40
Not more than Three Current-Carrying Conductors <sup>(2)</sup>		
Laid in Race way, Cable, or Earth {Directly Buried}	A	30
(i) - Ampacity based on NEC Table 310.15(B)(16) (Formerly Table 310.16) & Table 310.15(B)(17) (Formerly Table 310.17) - Refer to 310.15(B)(2)(a) for the ampacity correction factors where the ambient temperature is other than 30°C. - Refer to 110.14(C) for temperature rating limitations. - See Section 240.4 (D) for conductor overcurrent protection limitations. (ii) Refer to 310.15(B)(3)(a) for more than three current-carrying conductors		
The wire is generally according to: THHN designation		
Packing Data:		
Type		Spool
Length of Cable per Spool (± 2%)	m	152
Net Weight (Approximate)	kg	5.4
Cable Marking:		
BAHRA CABLES CO. KSA THHN / THWN 12 AWG ( 4 mm <sup>2</sup> ) 600 Volts VW-1 GASOLINE & OIL RESISTANT 105 ° C SASO / IEC 60227-3		
Cable Drawing		
		
Description	12 AWG CU / PVC (THHN)	Approx. Diameter
1	Copper conductor with round shape	2.26
2	PVC Insulation	3.02
3	Polyamide Nylon Jacketing	3.22