

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 | | YELLOW | | |
| 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(1) | | | | |
| Single-Insulated Conductor | | | | |
| Laid in free air | A | 40 | | |
| Not more than Three Current-Carrying Conductors ⁽²⁾ | | | | |
| Laid in Race way, Cable, or Earth {Directly Burried} | 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

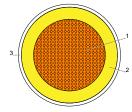
The wire is generally according to: THHN designation

| Packing Data: | | | | |
|----------------------------------|----|-------|--|--|
| Туре | | 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 mm2) 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 |

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