

60227 IEC 01 or YK 60227 IEC 01 THW

450/750V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED, SINGLE CORE



TIS 11 Part 3-2553

CABLE STRUCTURE

Conductor : Solid and stranded annealed copper wire
Insulation : Polyvinyl chloride (PVC/C)
Insulation color : Black
 (Other colors available upon request)

TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
 : Circuit voltage not exceeding 450/750 Volts
Rated voltage : 450 Volts between Line to Earth
 : 750 Volts between Line to Line
AC Testing voltage : 2,500 volts
Reference standard : TIS 11 Part 3-2553 Table 1

APPLICATION

Insulation : Polyvinyl chloride (PVC/C)

| Cable name | Nominal cross sectional area (mm ²) | Conductor type | Insulation thickness nominal (mm) | Overall diameter | | Conductor resistance at 20°C maximum (Ω/km) | Insulation resistance at 70°C minimum (MΩ-km) | Continuous current rating | | | Cable weight approx. (kg/km) | Standard Length (m) |
|---------------------|--|----------------|--------------------------------------|------------------|-----------------|--|--|---------------------------|---|-----------------|---------------------------------|------------------------|
| | | | | minimum (mm) | maximum (mm) | | | In free air at (40°C) | In Conduit in air at 40°C Single-phase | Three-phase | | |
| 60227 IEC 01 THW | 1.5 | Solid | 0.7 | 2.6 | 3.2 | 12.1 | 0.011 | 21 | 15 | 13 | 20 | 100/C |
| | 1.5 | Non-compacted | 0.7 | 2.7 | 3.3 | 12.1 | 0.010 | 21 | 15 | 13 | 25 | 100/C |
| | 2.5 | Solid | 0.8 | 3.2 | 3.9 | 7.41 | 0.010 | 28 | 21 | 18 | 35 | 100/C |
| | 2.5 | Non-compacted | 0.8 | 3.3 | 4.0 | 7.41 | 0.009 | 28 | 21 | 18 | 35 | 100/C |
| | 4 | Solid | 0.8 | 3.6 | 4.4 | 4.61 | 0.0085 | 37 | 28 | 24 | 50 | 100/C |
| | 4 | Non-compacted | 0.8 | 3.8 | 4.6 | 4.61 | 0.0077 | 37 | 28 | 24 | 55 | 100/C |
| YK 60227 IEC 01 THW | 6 | Non-compacted | 0.8 | 4.3 | 5.2 | 3.08 | 0.0065 | 49 | 36 | 31 | 70 | 100/C |
| | 10 | Non-compacted | 1.0 | 5.6 | 6.7 | 1.83 | 0.0065 | 68 | 50 | 44 | 120 | 100/C |
| | 16 | Compacted | 1.0 | 6.4 | 7.8 | 1.15 | 0.0050 | 91 | 66 | 59 | 170 | 100/C |
| | 25 | Compacted | 1.2 | 8.1 | 9.7 | 0.727 | 0.0050 | 122 | 88 | 77 | 270 | 100/C |
| | 35 | Compacted | 1.2 | 9.0 | 10.9 | 0.524 | 0.0043 | 151 | 109 | 96 | 360 | 100/C |
| | 50 | Compacted | 1.4 | 10.6 | 12.8 | 0.387 | 0.0043 | 184 | 131 | 117 | 490 | 1000/D |
| | 70 | Compacted | 1.4 | 12.1 | 14.6 | 0.268 | 0.0035 | 234 | 167 | 149 | 670 | 1000/D |
| | 95 | Compacted | 1.6 | 14.1 | 17.1 | 0.193 | 0.0035 | 292 | 202 | 180 | 930 | 1000/D |
| | 120 | Compacted | 1.6 | 15.6 | 18.8 | 0.153 | 0.0032 | 341 | 234 | 208 | 1150 | 1000/D |
| | 150 | Compacted | 1.8 | 17.3 | 20.9 | 0.124 | 0.0032 | 391 | 261 | 228 | 1420 | 1000/D |
| 185 | Compacted | 2.0 | 19.3 | 23.3 | 0.0991 | 0.0032 | 454 | 297 | 258 | 1780 | 1000/D | |
| 240 | Compacted | 2.2 | 22.0 | 26.6 | 0.0754 | 0.0032 | 543 | 348 | 301 | 2300 | 1000/D | |
| 60227 IEC 01 THW | 300 | Non-compacted | 2.4 | 24.5 | 29.6 | 0.0601 | 0.0030 | 628 | 398 | 343 | 3090 | 500/D |
| | 400 | Non-compacted | 2.6 | 27.5 | 33.2 | 0.047 | 0.0028 | 736 | 475 | 406 | 3930 | 500/D |

C = Packing in Coil
 D = Packing in drum

60227 IEC 01 or YK 60227 IEC 01 THW

450/750V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED, SINGLE CORE



 TIS 11 Part 3-2553

CABLE STRUCTURE

Conductor : Solid and stranded annealed copper wire
Insulation : Polyvinyl chloride (PVC/C)
Insulation color : Black
 (Other colors available upon request)

TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
 : Circuit voltage not exceeding 450/750 Volts
Rated voltage : 450 Volts between Line to Earth
 : 750 Volts between Line to Line
AC Testing voltage : 2,500 volts
Reference standard : TIS 11 Part 3-2553 Table 1

APPLICATION

Building wiring for installation on insulator or in raceway dry location.

| Cable name | Nominal cross sectional area (mm ²) | Conductor type | A.C Resistance | Inductance | Reactance | Impedance |
|---------------------|--|----------------|----------------|------------|-----------|-----------|
| | | | R (Ω/km) | L (mH/km) | XL (Ω/km) | Z (Ω/km) |
| 60227 IEC 01 THW | 1.5 | Solid | 14.4777 | 0.5259 | 0.1652 | 14.4786 |
| | 1.5 | Non-compacted | 14.4777 | 0.5276 | 0.1658 | 14.4786 |
| | 2.5 | Solid | 8.8661 | 0.5121 | 0.1609 | 8.8676 |
| | 2.5 | Non-compacted | 8.8661 | 0.5202 | 0.1634 | 8.8676 |
| | 4 | Solid | 5.5159 | 0.4917 | 0.1545 | 5.5181 |
| | 4 | Non-compacted | 5.5159 | 0.4870 | 0.1530 | 5.5180 |
| YK 60227 IEC 01 THW | 6 | Non-compacted | 3.6852 | 0.5606 | 0.1761 | 3.6894 |
| | 10 | Non-compacted | 2.1896 | 0.5219 | 0.1640 | 2.1957 |
| | 16 | Compacted | 1.3776 | 0.4642 | 0.1458 | 1.3853 |
| | 25 | Compacted | 0.8700 | 0.4594 | 0.1443 | 0.8819 |
| | 35 | Compacted | 0.6271 | 0.4496 | 0.1412 | 0.6428 |
| | 50 | Compacted | 0.4633 | 0.4477 | 0.1406 | 0.4842 |
| | 70 | Compacted | 0.3210 | 0.4354 | 0.1368 | 0.3489 |
| | 95 | Compacted | 0.2314 | 0.4347 | 0.1366 | 0.2687 |
| | 120 | Compacted | 0.1836 | 0.4295 | 0.1349 | 0.2278 |
| | 150 | Compacted | 0.1491 | 0.4292 | 0.1348 | 0.2010 |
| 60227 IEC 01 THW | 185 | Compacted | 0.1194 | 0.4281 | 0.1345 | 0.1798 |
| | 240 | Compacted | 0.0914 | 0.4257 | 0.1337 | 0.1620 |
| 60227 IEC 01 THW | 300 | Non-compacted | 0.0734 | 0.4177 | 0.1312 | 0.1504 |
| | 400 | Non-compacted | 0.0581 | 0.4160 | 0.1307 | 0.1430 |