

# Industrial Power & Control Tray Cable, Shielded

600V 90°C Dry / 75°C Wet

# TR series

### APPLICATION

Shielded Industrial Power and Control cables suitable for installation in cable tray, exposed run, open wiring, without conduit. Suitable for VFD applications with full size ground.

### CONSTRUCTION

**Conductor:** Finely stranded annealed copper to ASTM B-3 or ASTM B-33 and B-172 or B-174. Available in bare or tinned

**Insulation:** Enhanced formulation PVC/Nylon

**Assembly:** Conductors cabled with filler as required and overall Aluminum/ Polyester Shield + drain wire + 85% Tinned Copper Braid Shield

**Ripcord:** High strength ripcord under jacket

**Jacket:** Custom Formulation, Oil Resistant, Sunlight Resistant, Thermoplastic Elastomer

**Option:** 8 AWG and larger available with reduced size ground.

Consult Factory for Product Coding & Specifications.

### ALSO AVAILABLE

1000V UL Type WTTG

Wind Turbine Tray Cable per UL 2277

Consult Factory for Product Coding & Specifications

### OPERATING TEMP

-25°C to +90°C

### VOLTAGE RATING

600 Volts

### CORE IDENTIFICATION

To customer specification

### JACKET COLOR

To customer specification

### STANDARDS

ASTM B-3

ASTM B-33

ASTM B-172

ASTM B-174

UL 66 18 & 16 AWG

UL 83 14 AWG & Larger

UL 1277

CSA C22.2 No. 230

CSA C22.2 No. 239

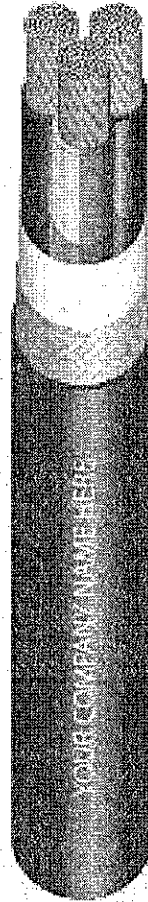
### APPROVALS

UL Type TC-ER

c(UL) Type CIC FT4

Sun Res

Oil Res I



| CATALOG CODE     | NUMBER OF CONDUCTORS (c) X AWG (cmil) | NOMINAL OVERALL DIAMETER |      | MINIMUM BENDING RADIUS (inches) | APPROX WEIGHT |         | CURRENT RATING (Amps) |
|------------------|---------------------------------------|--------------------------|------|---------------------------------|---------------|---------|-----------------------|
|                  |                                       | (inches)                 | (mm) |                                 | (lbs/ft)      | (kg/km) |                       |
| TRE-XXEN/2A14BK  | 2c 14                                 | 0.385                    | 9.8  | 2.3                             | 114           | 169     | 25                    |
| TRE-XXEN/3A14BK  | 3c 14                                 | 0.405                    | 10.3 | 2.4                             | 131           | 194     | 25                    |
| TRE-XXEN/4A14BK  | 4c 14                                 | 0.435                    | 11.0 | 2.6                             | 153           | 228     | 25                    |
| TRE-XXEN/5A14BK  | 5c 14                                 | 0.470                    | 11.9 | 2.8                             | 179           | 267     | 20                    |
| TRE-XXEN/6A14BK  | 6c 14                                 | 0.505                    | 12.8 | 3.0                             | 201           | 300     | 20                    |
| TRE-XXEN/7A14BK  | 7c 14                                 | 0.505                    | 12.8 | 3.0                             | 216           | 320     | 17                    |
| TRE-XXEN/8A14BK  | 8c 14                                 | 0.575                    | 14.6 | 3.5                             | 260           | 387     | 17                    |
| TRE-XXEN/9A14BK  | 9c 14                                 | 0.610                    | 15.5 | 3.7                             | 292           | 435     | 17                    |
| TRE-XXEN/10A14BK | 10c 14                                | 0.655                    | 16.6 | 3.9                             | 337           | 502     | 12                    |
| TRE-XXEN/12A14BK | 12c 14                                | 0.670                    | 17.0 | 4.0                             | 358           | 533     | 12                    |
| TRE-XXEN/16A14BK | 16c 14                                | 0.735                    | 18.7 | 4.4                             | 439           | 654     | 12                    |
| TRE-XXEN/18A14BK | 18c 14                                | 0.770                    | 19.6 | 4.6                             | 485           | 721     | 12                    |
| TRE-XXEN/19A14BK | 19c 14                                | 0.770                    | 19.6 | 4.6                             | 491           | 730     | 12                    |
| TRE-XXEN/25A14BK | 25c 14                                | 0.930                    | 23.6 | 5.6                             | 686           | 1021    | 11                    |
| TRE-XXEN/30A14BK | 30c 14                                | 0.975                    | 24.8 | 5.9                             | 764           | 1137    | 11                    |
| TRE-XXEN/37A14BK | 37c 14                                | 1.045                    | 26.5 | 6.3                             | 892           | 1328    | 10                    |

\*National Electrical Code Article 310 - Table 310.15(B)(16) (Formerly Table 310-16) Cond. Temp 90°C, Ambient Temp 30°C

| CATALOG CODE     | NUMBER OF CONDUCTORS (c) X AWG/kcmil | NOMINAL OVERALL DIAMETER |      | MINIMUM BENDING RADIUS (inches) | APPROX WEIGHT |         | CURRENT RATING (Amps) |
|------------------|--------------------------------------|--------------------------|------|---------------------------------|---------------|---------|-----------------------|
|                  |                                      | (inches)                 | (mm) |                                 | (lbs/100')    | (kg/km) |                       |
| TRE-XXEN/2A12BK  | 2c 12                                | 0.425                    | 10.8 | 2.6                             | 141           | 209     | 30                    |
| TRE-XXEN/3A12BK  | 3c 12                                | 0.445                    | 11.3 | 2.7                             | 165           | 246     | 30                    |
| TRE-XXEN/4A12BK  | 4c 12                                | 0.475                    | 12.1 | 2.9                             | 197           | 293     | 30                    |
| TRE-XXEN/5A12BK  | 5c 12                                | 0.515                    | 13.1 | 3.1                             | 232           | 346     | 24                    |
| TRE-XXEN/6A12BK  | 6c 12                                | 0.590                    | 15.0 | 3.5                             | 280           | 417     | 24                    |
| TRE-XXEN/7A12BK  | 7c 12                                | 0.590                    | 15.0 | 3.5                             | 301           | 448     | 21                    |
| TRE-XXEN/9A12BK  | 9c 12                                | 0.675                    | 17.1 | 4.1                             | 386           | 573     | 21                    |
| TRE-XXEN/12A12BK | 12c 12                               | 0.745                    | 18.9 | 4.5                             | 477           | 710     | 15                    |
| TRE-XXEN/16A12BK | 16c 12                               | 0.820                    | 20.8 | 4.9                             | 593           | 883     | 15                    |
| TRE-XXEN/19A12BK | 19c 12                               | 0.905                    | 23.0 | 5.4                             | 703           | 1046    | 15                    |
| TRE-XXEN/20A12BK | 20c 12                               | 0.945                    | 24.0 | 5.7                             | 762           | 1134    | 15                    |
| TRE-XXEN/25A12BK | 25c 12                               | 1.040                    | 26.4 | 6.2                             | 930           | 1385    | 13                    |
| TRE-XXEN/30A12BK | 30c 12                               | 1.090                    | 27.7 | 6.5                             | 1044          | 1553    | 13                    |
| TRE-XXEN/37A12BK | 37c 12                               | 1.170                    | 29.7 | 7.0                             | 1229          | 1829    | 12                    |
| TRE-XXEN/2A10BK  | 2c 10                                | 0.495                    | 12.6 | 3.0                             | 193           | 287     | 40                    |
| TRE-XXEN/3A10BK  | 3c 10                                | 0.520                    | 13.2 | 3.1                             | 231           | 344     | 40                    |
| TRE-XXEN/4A10BK  | 4c 10                                | 0.595                    | 15.1 | 3.6                             | 296           | 441     | 40                    |
| TRE-XXEN/5A10BK  | 5c 10                                | 0.645                    | 16.4 | 3.9                             | 351           | 523     | 32                    |
| TRE-XXEN/7A10BK  | 7c 10                                | 0.700                    | 17.8 | 4.2                             | 433           | 645     | 28                    |
| TRE-XXEN/9A10BK  | 9c 10                                | 0.800                    | 20.3 | 4.8                             | 559           | 832     | 28                    |
| TRE-XXEN/12A10BK | 12c 10                               | 0.935                    | 23.7 | 5.6                             | 737           | 1097    | 20                    |
| TRE-XXEN/19A10BK | 19c 10                               | 1.080                    | 27.4 | 6.5                             | 1039          | 1546    | 20                    |
| TRE-XXEN/4A8BK   | 4c 8                                 | 0.730                    | 18.5 | 4.4                             | 440           | 654     | 55                    |
| TRE-XXEN/5A8BK   | 5c 8                                 | 0.795                    | 20.2 | 4.8                             | 527           | 784     | 44                    |
| TRE-XXEN/3A6BK   | 3c 6                                 | 0.760                    | 19.3 | 4.6                             | 495           | 736     | 75                    |
| TRE-XXEN/4A6BK   | 4c 6                                 | 0.825                    | 21.0 | 5.0                             | 609           | 907     | 75                    |
| TRE-XXEN/5A6BK   | 5c 6                                 | 0.950                    | 24.1 | 5.7                             | 773           | 1151    | 60                    |
| TRE-XXEN/3A4BK   | 3c 4                                 | 0.960                    | 24.4 | 5.8                             | 781           | 1132    | 95                    |
| TRE-XXEN/4A4BK   | 4c 4                                 | 1.045                    | 26.5 | 6.3                             | 940           | 1399    | 95                    |
| TRE-XXEN/5A4BK   | 5c 4                                 | 1.145                    | 29.1 | 6.9                             | 1139          | 1695    | 76                    |
| TRE-XXEN/3A2BK   | 3c 2                                 | 1.090                    | 27.7 | 6.5                             | 1063          | 1581    | 130                   |
| TRE-XXEN/4A2BK   | 4c 2                                 | 1.190                    | 30.2 | 7.1                             | 1328          | 1976    | 130                   |
| TRE-XXEN/5A2BK   | 5c 2                                 | 1.310                    | 33.3 | 7.9                             | 1820          | 2411    | 104                   |
| TRE-XXEN/3A1BK   | 3c 1                                 | 1.215                    | 30.9 | 7.3                             | 1316          | 1958    | 145                   |
| TRE-XXEN/4A1BK   | 4c 1                                 | 1.330                    | 33.8 | 8.0                             | 1651          | 2457    | 145                   |
| TRE-XXEN/4A1/0BK | 4c 1/0                               | 1.425                    | 36.2 | 8.6                             | 1986          | 2955    | 170                   |
| TRE-XXEN/4A2/0BK | 4c 2/0                               | 1.545                    | 39.2 | 9.3                             | 2405          | 3579    | 195                   |
| TRE-XXEN/4A3/0BK | 4c 3/0                               | 1.665                    | 42.3 | 10.0                            | 2917          | 4340    | 225                   |
| TRE-XXEN/4A4/0BK | 4c 4/0                               | 1.915                    | 48.6 | 11.5                            | 3721          | 5536    | 260                   |
| TRE-XXEN/4A250BK | 4c 250 kcmil                         | 2.090                    | 53.1 | 12.5                            | 4336          | 6452    | 290                   |
| TRE-XXEN/4A300BK | 4c 300 kcmil                         | 2.195                    | 55.8 | 13.2                            | 5036          | 7494    | 320                   |
| TRE-XXEN/4A350BK | 4c 350 kcmil                         | 2.330                    | 59.2 | 14.0                            | 5809          | 8644    | 350                   |
| TRE-XXEN/4A400BK | 4c 400 kcmil                         | 2.400                    | 61.0 | 14.4                            | 6442          | 9586    | 380                   |
| TRE-XXEN/4A500BK | 4c 500 kcmil                         | 2.615                    | 66.4 | 15.7                            | 7866          | 11705   | 430                   |

\*National Electrical Code Article 310 - Table 310.15(B)(16) (Formerly Table 310-16), Cond Temp 90°C, Ambient Temp 30°C

# Industrial Power & Control Tray Cable, Shielded

600V 90°C Dry 75°C Wet

# TR series

| CATALOG<br>CODE  | NUMBER OF<br>CONDUCTORS (c)<br>X | NOMINAL<br>OVERALL<br>DIAMETER |          | MINIMUM<br>BENDING<br>RADIUS | APPRX<br>WEIGHT |          | CURRENT<br>RATING* |
|------------------|----------------------------------|--------------------------------|----------|------------------------------|-----------------|----------|--------------------|
|                  |                                  | (AWG/Kcmil)                    | (Inches) |                              | (mm)            | (lbs/ft) |                    |
| TRE-XXEN/2A18BK  | 2c 18                            | 0.335                          | 8.5      | 2.0                          | 80              | 119      | 14                 |
| TRE-XXEN/3A18BK  | 3c 18                            | 0.345                          | 8.8      | 2.1                          | 89              | 132      | 14                 |
| TRE-XXEN/4A18BK  | 4c 18                            | 0.370                          | 9.4      | 2.2                          | 101             | 150      | 14                 |
| TRE-XXEN/5A18BK  | 5c 18                            | 0.395                          | 10.0     | 2.4                          | 116             | 173      | 11                 |
| TRE-XXEN/6A18BK  | 6c 18                            | 0.420                          | 10.7     | 2.5                          | 129             | 192      | 11                 |
| TRE-XXEN/7A18BK  | 7c 18                            | 0.420                          | 10.7     | 2.5                          | 135             | 201      | 9                  |
| TRE-XXEN/8A18BK  | 8c 18                            | 0.450                          | 11.4     | 2.7                          | 151             | 225      | 9                  |
| TRE-XXEN/9A18BK  | 9c 18                            | 0.475                          | 12.1     | 2.9                          | 169             | 251      | 9                  |
| TRE-XXEN/10A18BK | 10c 18                           | 0.510                          | 13.0     | 3.1                          | 195             | 290      | 7                  |
| TRE-XXEN/12A18BK | 12c 18                           | 0.525                          | 13.3     | 3.2                          | 203             | 302      | 7                  |
| TRE-XXEN/14A18BK | 14c 18                           | 0.580                          | 14.7     | 3.5                          | 239             | 356      | 7                  |
| TRE-XXEN/15A18BK | 15c 18                           | 0.605                          | 15.4     | 3.6                          | 262             | 390      | 7                  |
| TRE-XXEN/16A18BK | 16c 18                           | 0.605                          | 15.4     | 3.6                          | 262             | 390      | 7                  |
| TRE-XXEN/18A18BK | 18c 18                           | 0.635                          | 16.1     | 3.8                          | 286             | 426      | 7                  |
| TRE-XXEN/19A18BK | 19c 18                           | 0.635                          | 16.1     | 3.8                          | 288             | 429      | 7                  |
| TRE-XXEN/20A18BK | 20c 18                           | 0.660                          | 16.8     | 4.0                          | 313             | 466      | 7                  |
| TRE-XXEN/25A18BK | 25c 18                           | 0.725                          | 18.4     | 4.4                          | 376             | 559      | 6                  |
| TRE-XXEN/27A18BK | 27c 18                           | 0.735                          | 18.7     | 4.4                          | 385             | 573      | 6                  |
| TRE-XXEN/30A18BK | 30c 18                           | 0.760                          | 19.3     | 4.6                          | 412             | 613      | 6                  |
| TRE-XXEN/34A18BK | 34c 18                           | 0.810                          | 20.6     | 4.9                          | 481             | 716      | 5                  |
| TRE-XXEN/37A18BK | 37c 18                           | 0.810                          | 20.6     | 4.9                          | 476             | 708      | 5                  |
| TRE-XXEN/40A18BK | 40c 18                           | 0.885                          | 22.5     | 5.3                          | 544             | 809      | 5                  |
| TRE-XXEN/41A18BK | 41c 18                           | 0.910                          | 23.1     | 5.5                          | 584             | 869      | 4                  |
| TRE-XXEN/50A18BK | 50c 18                           | 0.980                          | 24.9     | 5.9                          | 674             | 1003     | 4                  |
| TRE-XXEN/61A18BK | 61c 18                           | 1.035                          | 26.3     | 6.2                          | 751             | 1117     | 4                  |
| TRE-XXEN/2A16BK  | 2c 16                            | 0.355                          | 9.0      | 2.1                          | 93              | 138      | 18                 |
| TRE-XXEN/3A16BK  | 3c 16                            | 0.370                          | 9.4      | 2.2                          | 105             | 156      | 18                 |
| TRE-XXEN/4A16BK  | 4c 16                            | 0.395                          | 10.0     | 2.4                          | 121             | 180      | 18                 |
| TRE-XXEN/5A16BK  | 5c 16                            | 0.425                          | 10.8     | 2.6                          | 140             | 208      | 14                 |
| TRE-XXEN/6A16BK  | 6c 16                            | 0.455                          | 11.6     | 2.7                          | 156             | 232      | 14                 |
| TRE-XXEN/7A16BK  | 7c 16                            | 0.455                          | 11.6     | 2.7                          | 165             | 246      | 12                 |
| TRE-XXEN/8A16BK  | 8c 16                            | 0.485                          | 12.3     | 2.9                          | 186             | 277      | 12                 |
| TRE-XXEN/9A16BK  | 9c 16                            | 0.515                          | 13.1     | 3.1                          | 209             | 311      | 12                 |
| TRE-XXEN/10A16BK | 10c 16                           | 0.590                          | 15.0     | 3.5                          | 259             | 385      | 9                  |
| TRE-XXEN/12A16BK | 12c 16                           | 0.605                          | 15.4     | 3.6                          | 272             | 405      | 9                  |
| TRE-XXEN/14A16BK | 14c 16                           | 0.630                          | 16.0     | 3.8                          | 299             | 445      | 9                  |
| TRE-XXEN/15A16BK | 15c 16                           | 0.660                          | 16.8     | 4.0                          | 328             | 488      | 9                  |
| TRE-XXEN/16A16BK | 16c 16                           | 0.660                          | 16.8     | 4.0                          | 329             | 490      | 9                  |
| TRE-XXEN/18A16BK | 18c 16                           | 0.690                          | 17.5     | 4.1                          | 362             | 539      | 9                  |
| TRE-XXEN/19A16BK | 19c 16                           | 0.690                          | 17.5     | 4.1                          | 365             | 543      | 9                  |
| TRE-XXEN/20A16BK | 20c 16                           | 0.720                          | 18.3     | 4.3                          | 397             | 591      | 9                  |
| TRE-XXEN/25A16BK | 25c 16                           | 0.790                          | 20.1     | 4.7                          | 480             | 714      | 8                  |
| TRE-XXEN/27A16BK | 27c 16                           | 0.805                          | 20.4     | 4.8                          | 494             | 735      | 8                  |
| TRE-XXEN/30A16BK | 30c 16                           | 0.830                          | 21.1     | 5.0                          | 531             | 790      | 8                  |
| TRE-XXEN/34A16BK | 34c 16                           | 0.935                          | 23.7     | 5.6                          | 657             | 978      | 7                  |
| TRE-XXEN/37A16BK | 37c 16                           | 0.935                          | 23.7     | 5.6                          | 654             | 973      | 7                  |
| TRE-XXEN/40A16BK | 40c 16                           | 0.965                          | 24.5     | 5.8                          | 700             | 1042     | 7                  |
| TRE-XXEN/41A16BK | 41c 16                           | 0.995                          | 25.3     | 6.0                          | 751             | 1117     | 6                  |
| TRE-XXEN/50A16BK | 50c 16                           | 1.075                          | 27.3     | 6.5                          | 874             | 1301     | 6                  |
| TRE-XXEN/61A16BK | 61c 16                           | 1.135                          | 28.8     | 6.8                          | 981             | 1460     | 6                  |

\*National Electrical Code Article 310 - Table 310.15(B)(16) (Formerly Table 310-16), Cond. Temp 90°C, Ambient Temp 30°C