SERIES 365S

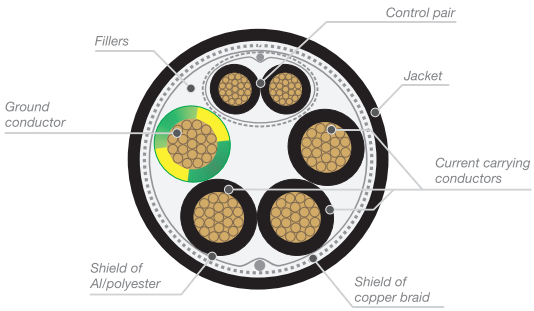
# Low capacity VFD 1xG+1xP cables, TC-ER/CIC/MTW/WTTC, Dir Bur, Sun Res

Fixed application, shielded with control pair


## Use

These are UL Listed, oil resistant, low capacitance servo motor cables (Variable Frequency Drive) planned for fixed application but also for occasional non-cyclical mobile uses. They are used wherever the potential for electromagnetic interference due to drives, frequency converter and motor is high. These cables are different than the traditional ones for their constructive peculiarities, including the double screen, the compounds used for the insulation and the constructive geometry. It is thanks to these and many other factors that this range of cables is able to ensure a low operational capacity, to limit overvoltage peaks which often cause damage to connected equipment and, not least, a consequent reduction of the losses. They are Type TC-ER (Exposed Run) cables suitable for the uses specified by ANSI/NFPA 79 and by articles 336, 392, 501 of the ANSI/NFPA 70 "National Electrical Code" (NEC) and suitable for use in Class I, Division 2, Hazardous Locations. They are certified Flexible Motor Supply Cable for variable speed drives and Wind Turbine Tray Cable (WTTC) for wind applications. They are also Type TC-ER/CIC for uses in accordance with CSA C22.1 (CE Code). The cables identified with Type TC-ER (Exposed Run) can be installed in the industrial plants for the connections between the cable trays and the equipment without the employment of metal conduits. These cables can be used in the presence of humidity also buried (they are certified Direct Burial according UL 1277) and are produced to meet the requirements of the European (EC) and North American markets. The metric marked on the jacket allows an easier processing and installation of the cable.

Information. An additional UL certified cut-to-length service is carried out on request ("Processed Wire").




## Technical data

| Characteristics | Value/property |
|---|---|
| Conductor | Flexible copper strand, class 5 |
| Insulation | Special XLPE (type XHHW-2) |
| Conductor distinction | Black numbered + yellow/green |
| Fillers | Central or side fillers, if any |
| Shield | Aluminum/polyester foil, coverage 100% + Tinned copper braid + Drain wire |
| Shield on pairs | Aluminum/polyester foil, coverage 100% + Tinned copper braid + Drain wire |
| Jacket | PVC compound, oil-resistant, RAL 7001 gray color. Metric marking. |
| Temperature range | -40°C (fixed); -5°C (not fixed), +90°C |
| Voltage rating | 600 V (TC/CIC/MTW), 1000 V (WTTC), 600/1000 V (IEC) |
| Test voltage | 6000 V |
| Bending radius | 6 x cable outer diameter (fixed)<br>20 x cable outer diameter (not fixed) |
| Standards of construction | UL/CSA approvals: (UL) Type TC-ER, MTW, WTTC, Dir Bur, Sun Res Oil Res I, c(UL) Type CIC/TC-ER, Dir Bur, Sun Res, Oil Res I, Type RW90 (≥14 AWG); NFPA 79; Class 1, Div. 2 NEC Art. 336, 392, 501, CSA C22.1 Tab.19; UL 1063, UL 1277, UL 2277,, CSA C22.2 No.239-09 \| Flame res.: FT4/IEEE UL 1685 \| UV res.: UNI EN ISO 4892-2 (black) \| Oil res.: Oil Res I UL 1277; Water res.: 90°C UL 1277; Other: Direct Burial UL 1277, Low Voltage Directive (LVD) 2014/35/EU |
| Standards of use | NFPA 79, NFPA 70 (NEC), UL 508a, CSA C22.1 (CE Code), CSA C22.2 No.286 |

## Marking

TEKIMA 0365S – CE VFD ((4G16)+1X(2X1,5)) mm² 600/1000 V - (UL) E361258 TC-ER ((4X6)+1X(2X16)) AWG DIR BUR SUN RES OIL RES I 600V XHHW-2 90°C Dry / 90°C Wet FT4/IEEE 1202 or WTTC or FLEXIBLE MOTOR SUPPLY CABLE 1000V 90°C Dry or MTW 600V c(UL) CONTROL CABLE CIC/TC-ER DIR BUR SUN RES OIL RES I 600V 90°C Dry / 90°C Wet FT4 or RW90 – (prod.reference) = (metric) =

## Coding and dimensions

| Code | Num. conductors x size [mm²] | Num. conductors x size [AWG/kcmil] | Diameter [mm (inch)] | Weight [kg/km (lb/mft)] |
|---|---|---|---|---|
| **CVFM0101_0365S_□□** | (4G1,5+1x(2x1)) | (4x16+1x(2x18)) | 14,3 (0.562) | 267 (179) |
| **CVFM0102_0365S_□□** | (4G1,5+1x(2x1,5)) | (4x16+1x(2x16)) | 14,9 (0.586) | 286 (192) |
| **CVFM0103_0365S_□□** | (4G2,5+1x(2x1)) | (4x14+1x(2x18)) | 15,0 (0.590) | 316 (212) |
| **CVFM0104_0365S_□□** | (4G2,5+1x(2x1,5)) | (4x14+1x(2x16)) | 15,5 (0.610) | 339 (227) |
| **CVFM0105_0365S_□□** | (4G4+1x(2x1)) | (4x12+1x(2x18)) | 16,5 (0.649) | 414 (278) |
| **CVFM0106_0365S_□□** | (4G4+1x(2x1,5)) | (4x12+1x(2x16)) | 17,0 (0.669) | 432 (290) |
| **CVFM0107_0365S_□□** | (4G4+1x(2x2,5)) | (4x12+1x(2x14)) | 17,4 (0.685) | 466 (313) |
| **CVFM0108_0365S_□□** | (4G6+1x(2x1)) | (4x10+1x(2x18)) | 17,5 (0.688) | 508 (341) |
| **CVFM0109_0365S_□□** | (4G6+1x(2x1,5)) | (4x10+1x(2x16)) | 17,6 (0.692) | 519 (348) |
| **CVFM0110_0365S_□□** | (4G6+1x(2x2,5)) | (4x10+1x(2x14)) | 18,5 (0.728) | 553 (371) |

| Code | Num. conductors x size [mm²] | Num. conductors x size [AWG/kcmil] | Diameter [mm (inch)] | Weight [kg/km (lb/mft)] |
|---|---|---|---|---|
| **CVFM0111_0365S_□□** | (4G10+1x(2x1)) | (4x8+1x(2x18)) | 22,4 (0.881) | 804 (540) |
| **CVFM0112_0365S_□□** | (4G10+1x(2x1,5)) | (4x8+1x(2x16)) | 22,7 (0.893) | 820 (551) |
| **CVFM0113_0365S_□□** | (4G10+1x(2x2,5)) | (4x8+1x(2x14)) | 23,3 (0.917) | 851 (571) |
| **CVFM0114_0365S_□□** | (4G16+1x(2x1)) | (4x6+1x(2x18)) | 24,5 (0.964) | 1060 (712) |
| **CVFM0115_0365S_□□** | (4G16+1x(2x1,5)) | (4x6+1x(2x16)) | 24,8 (0.976) | 1081 (726) |
| **CVFM0116_0365S_□□** | (4G16+1x(2x2,5)) | (4x6+1x(2x14)) | 25,4 (1.000) | 1122 (753) |
| **CVFM0117_0365S_□□** | (4G25+1x(2x1,5)) | (4x4+1x(2x16)) | 28,2 (1.110) | 1494 (1003) |
| **CVFM0118_0365S_□□** | (4G25+1x(2x2,5)) | (4x4+1x(2x14)) | 28,3 (1.114) | 1522 (1022) |
| **CVFM0119_0365S_□□** | (4G35+1x(2x1,5)) | (4x2+1x(2x16)) | 30,8 (1.212) | 1910 (1283) |
| **CVFM0120_0365S_□□** | (4G35+1x(2x2,5)) | (4x2+1x(2x14)) | 31,2 (1.228) | 1940 (1303) |
| **CVFM0121_0365S_□□** | (4G50+1x(2x1,5)) | (4x1+1x(2x16)) | 35,8 (1.409) | 2613 (1755) |

## Code composition

**CVFM** | □□□□ | **_0365S_** | □□

| Color | To be inserted |
|---|---|
| Black | NE |

**Construction**

Identifier code of the special cable construction.