

## LV CONTROL, MULTI CORE, ARMoured CABLE AS PER IEC 60502-1 (CU/XLPE/PVC/SWA/PVC)

### APPLICATION

These types of cables are used for industrial machinery, signal and power transmission for machinery, control & monitoring of electrical systems, underground & outdoor installations, and infrastructure projects, providing robust mechanical protection and durability.

### CONSTRUCTION

|                                                    |                                                                                                                                                                          |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductor:</b>                                  | Stranded (Class 2) Annealed Plain Copper Conductor to IEC 60228.                                                                                                         |
| <b>Insulation:</b>                                 | Cross linked polyethylene (XLPE)                                                                                                                                         |
| <b>Insulation Color:</b>                           | 2C:- Red & Black<br>3C:- Red, Yellow & Blue<br>4C:- Red, Yellow, Blue & Black<br>5C & above:- Black core with number printed<br>Other colors are available upon request. |
| <b>Laying Up:</b>                                  | Cores are assembled in concentric layers and laid up with a non-hygroscopic filler (if required), and the assembly is wrapped with binder tape.                          |
| <b>Inner Sheath:</b>                               | Extruded layer of Polyvinyl Chloride (PVC) consistent with the operating temperature of the cable in Black colour. Other colors are available upon request.              |
| <b>Armouring:</b>                                  | A single layer of round galvanized steel wire armour is applied over the bedding.                                                                                        |
| <b>Outer Sheath:</b>                               | Extruded Polyvinyl Chloride (PVC) Type ST-2 to IEC 60502-1 in Black color. Other colors are available upon request.                                                      |
| <b>Marking Text on the Outer Sheath (Example):</b> | CU/XLPE/PVC/SWA/PVC (NO. OF CORES X CONDUCTOR SIZE) 600/1000V IEC 60502-1 TEKAB YEAR OF MANUFACTURE MADE IN UAE LENGTH METER MARKING                                     |



### TECHNICAL DATA

|                               |                                                                          |
|-------------------------------|--------------------------------------------------------------------------|
| <b>Operating Temperature:</b> | During Normal Operation - 90°C<br>During Short Circuit Condition - 250°C |
| <b>Voltage Rating:</b>        | 600/1000V                                                                |
| <b>Voltage Withstand:</b>     | 3500 V a.c. r.m.s. for 5 minutes                                         |

\*Other special sheath materials are also available with Flame Retardant:- IEC 60332-1-2, IEC 60332-3-22 (CAT A), IEC 60332-3-24 (CAT C), Low Smoke, UV / Sunlight Resistant, Oil Resistant, Anti-Termite, Anti-Rodent.

**Circular Conductor:-**

| SERIAL NO. | TEKAB CODE | NO. OF CORES X CONDUCTOR SIZE (NO. X Sq.mm.) | NO. OF STRANDS | NOMINAL INSULATION THICKNESS (mm) | NOMINAL INNER SHEATH THICKNESS (mm) | NOMINAL ROUND ARMOUR WIRE DIAMETER (mm) | NOMINAL OUTER SHEATH THICKNESS (mm) | APPROX. OVERALL DIAMETER (mm) | APPROX. WEIGHT (kg/km) |
|------------|------------|----------------------------------------------|----------------|-----------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|-------------------------------|------------------------|
| 1          | XVZ2V      | 2C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 13.5                          | 360                    |
| 2          | XVZ2V      | 3C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 14.0                          | 400                    |
| 3          | XVZ2V      | 4C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 15.0                          | 450                    |
| 4          | XVZ2V      | 5C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 15.8                          | 500                    |
| 5          | XVZ2V      | 6C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 16.5                          | 550                    |
| 6          | XVZ2V      | 7C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 16.5                          | 575                    |
| 7          | XVZ2V      | 8C X 1.5                                     | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 18.0                          | 700                    |
| 8          | XVZ2V      | 10C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 19.2                          | 800                    |
| 9          | XVZ2V      | 12C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 20.2                          | 875                    |
| 10         | XVZ2V      | 14C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 21.2                          | 950                    |
| 11         | XVZ2V      | 15C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 21.5                          | 1000                   |
| 12         | XVZ2V      | 16C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 22.0                          | 1050                   |
| 13         | XVZ2V      | 18C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 23.0                          | 1125                   |
| 14         | XVZ2V      | 19C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 23.5                          | 1150                   |
| 15         | XVZ2V      | 20C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 24.5                          | 1325                   |
| 16         | XVZ2V      | 22C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 25.0                          | 1400                   |
| 17         | XVZ2V      | 24C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 26.0                          | 1475                   |
| 18         | XVZ2V      | 25C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 26.0                          | 1505                   |
| 19         | XVZ2V      | 26C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 26.5                          | 1550                   |
| 20         | XVZ2V      | 30C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 27.8                          | 1700                   |
| 21         | XVZ2V      | 32C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 28.5                          | 1775                   |
| 22         | XVZ2V      | 35C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 29.3                          | 1875                   |
| 23         | XVZ2V      | 36C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 29.5                          | 1925                   |
| 24         | XVZ2V      | 40C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.9                                 | 31.0                          | 2050                   |
| 25         | XVZ2V      | 50C X 1.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 2.0                                 | 33.8                          | 2400                   |
| 26         | XVZ2V      | 61C X 1.5                                    | 7              | 0.7                               | 1.2                                 | 2.0                                     | 2.1                                 | 37.5                          | 3050                   |

| SERIAL NO. | TEKAB CODE | NO. OF CORES X CONDUCTOR SIZE (NO. X Sq.mm.) | NO. OF STRANDS | NOMINAL INSULATION THICKNESS (mm) | NOMINAL INNER SHEATH THICKNESS (mm) | NOMINAL ROUND ARMOUR WIRE DIAMETER (mm) | NOMINAL OUTER SHEATH THICKNESS (mm) | APPROX. OVERALL DIAMETER (mm) | APPROX. WEIGHT (kg/km) |
|------------|------------|----------------------------------------------|----------------|-----------------------------------|-------------------------------------|-----------------------------------------|-------------------------------------|-------------------------------|------------------------|
| 27         | XVZ2V      | 2C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 14.5                          | 425                    |
| 28         | XVZ2V      | 3C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 15.0                          | 475                    |
| 29         | XVZ2V      | 4C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 15.8                          | 525                    |
| 30         | XVZ2V      | 5C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 0.9                                     | 1.8                                 | 16.8                          | 600                    |
| 31         | XVZ2V      | 6C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 18.5                          | 760                    |
| 32         | XVZ2V      | 7C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 18.5                          | 775                    |
| 33         | XVZ2V      | 8C X 2.5                                     | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 19.5                          | 840                    |
| 34         | XVZ2V      | 10C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 20.8                          | 950                    |
| 35         | XVZ2V      | 12C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 22.0                          | 1075                   |
| 36         | XVZ2V      | 14C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.25                                    | 1.8                                 | 23.0                          | 1175                   |
| 37         | XVZ2V      | 15C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 24.3                          | 1375                   |
| 38         | XVZ2V      | 16C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 24.5                          | 1425                   |
| 39         | XVZ2V      | 18C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 25.5                          | 1535                   |
| 40         | XVZ2V      | 19C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 26.0                          | 1575                   |
| 41         | XVZ2V      | 20C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 26.5                          | 1625                   |
| 42         | XVZ2V      | 22C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 27.5                          | 1725                   |
| 43         | XVZ2V      | 24C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 28.2                          | 1825                   |
| 44         | XVZ2V      | 25C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 28.5                          | 1875                   |
| 45         | XVZ2V      | 26C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.8                                 | 29.0                          | 1925                   |
| 46         | XVZ2V      | 30C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.9                                 | 30.5                          | 2125                   |
| 47         | XVZ2V      | 32C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.9                                 | 31.5                          | 2250                   |
| 48         | XVZ2V      | 35C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.9                                 | 32.5                          | 2375                   |
| 49         | XVZ2V      | 36C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 1.9                                 | 32.5                          | 2425                   |
| 50         | XVZ2V      | 40C X 2.5                                    | 7              | 0.7                               | 1.0                                 | 1.6                                     | 2.0                                 | 34.0                          | 2625                   |
| 51         | XVZ2V      | 50C X 2.5                                    | 7              | 0.7                               | 1.2                                 | 2.0                                     | 2.1                                 | 38.5                          | 3375                   |
| 52         | XVZ2V      | 61C X 2.5                                    | 7              | 0.7                               | 1.2                                 | 2.0                                     | 2.2                                 | 41.5                          | 3900                   |