

# BITservo<sup>®</sup> 3GSEGCY 3,6/6 kV



Medium voltage cable for connections between motor and frequency converter (VFD)



## Technical data:

**Thermal parameters:**  
**Operating temperature:** -30 °C to 80 °C  
**Min. installation temperature:** -5 °C  
**Max conductor operating temperature:** 90 °C  
**Max conductor temperature during short circuit (max 5s):** 250 °C

**Electrical parameters:**  
**Operating voltage\*\*:**  $U_0/U = 3,6/6$  kV  
**Test voltage:** 11 kV

**Mechanical parameters:**  
**Max pulling force during installation [N]:** 50\*S  
 S - sum of cross sections of power conductors in mm<sup>2</sup>  
**Min bending radius:** 12 x  $\varnothing$

## Design:

**Conductors:** bare copper conductors, multi-stranded, class 2 acc. to EN 60228

**Semiconductive layer on conductor:** special semi-conductive rubber compound acc. to IEC 60502-2  
 EPR rubber acc. to IEC 60502-2

**Insulation: Outer semiconductive layer:** special semi-conductive rubber compound acc. to IEC 60502-2

**Screen on insulated conductor:** copper tape wrapping on each conductor numbers on outer semi-conductive layer

**Core identification:** special polymer compound acc. to IEC 60502-2

**Filler:** copper wires and helically applied copper tape, cross section of concentric conductor equals half of the cross section of phase conductor

**Concentric conductor:** special, oil resistant PVC, flame retardant acc. to EN 60332-1-2; colour: red

**Outer sheath:** special, oil resistant PVC, flame retardant acc. to EN 60332-1-2; colour: red

Cross section of Cu tapes on conductors  
 sum of cross sections for 3 conductors)

Cross section of phase conductor	Cross section of Cu tapes
35...120 mm <sup>2</sup>	16 mm <sup>2</sup>
>120 mm <sup>2</sup>	25 mm <sup>2</sup>

\*\* on customer's request cables rated 6/10 kV can be produced

## Application:

BITservo 3GSEGCY 3,6/6 kV cables are designed for connection between frequency converters (VFD) and medium voltage motors. They are suitable for installation inside buildings in dry and damp rooms but also outdoors (resistance to UV and atmospheric conditions) or buried directly in ground. Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm <sup>2</sup>	Outer diameter* [mm]	Current-carrying capacity *) [A]	Capacitance [nF/km]	Approximate cable weight [kg/km]
IP1100	3x35/18	46,6	169	280	3320
IP1101	3x50/25	50,4	203	300	4060
IP1102	3x70/35	54,5	253	350	5000
IP1103	3x95/50	59,3	306	390	6375
IP1104	3x120/60	63,3	352	420	7310
IP1105	3x150/75	67,9	400	460	8840
IP1106	3x185/95	71,0	451	500	10215
IP1107	3x240/120	77,8	523	560	12545

\*Outer diameter tolerance: +/- 5%  
 \*\*) - current-carrying capacity of a single cable in air at a temperature of 30 °C  
 Cable Factory BITNER reserves the right to modify the specifications without prior notice  
 Note: on customer's request other cross sections or number of cores can be produced