

TYPE SHD-GC 3/c 25kV

Three conductor Round portable power cable Mining grade

SPECIFICATIONS & STANDARDS

ICEA S-75-381/NEMA WC58
ASTM B 172, ASTM B 33

CONSTRUCTION:

Conductors:	Annealed flexible stranded tin coated copper in accordance with ASTM B 172 and ICEA S-75-381
Conductors shield:	Semi-conducting layer over the conductor
Insulation:	Ethylene-propylene rubber (EPR)
Insulation shield:	Semi-conducting tape + composite tinned copper/nylon braid covering minimum 60%
Circuit identification:	The nylon in the shielding braid is colored black, white, red in accordance with ICEA S-75-381
Grounding conductors:	Annealed tin coated copper as per Tab. 3-24 of ICEA S-75-381
Ground check:	Annealed tin coated copper as per Tab. 3-21 of ICEA S-75-381 Color of insulation: yellow
Assembly:	Three power conductor, ground check and two non-insulated grounding conductors cabled together; Single faced rubber filled binder tape applied overall; Integral filled jacket for higher torsion resistance
Jacket:	Reinforced Neoprene® (optional CPE, TPU jacket available) Type extra heavy duty in accordance with Par. 3.21 of ICEA S-75-381
Color of jacket:	Black; Other colors available



FEATURES	APPLICATION
<ul style="list-style-type: none">- Excellent flexibility- Highly ozone, sun, weather and flame resistant- Rated and flexible at -40°C- Excellent impact and abrasion resistant- Oil and heat resistant- Indent printed for easy identification	<ul style="list-style-type: none">- These cables are used for heavy mobile equipment such as drag lines, shovels, dredges, drills, other track equipment, and for power feeders in underground mines- Maximum continuous conductor temperature is 90°C

Standard length cable packing: 1000 ft reels; Other forms of packaging available

APPROVALS:

MSHA:	P-07-KA060012 (Neoprene) P-07-KA030001 (TPU)
CSA:	1523058 (LR 103932) - "FT1"; "FT5"; "90°C"; "(-40°C)" (Neoprene)

Neoprene is a registered trademark of DuPont



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12/08 v2.4

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Part Number	Power Conductor Size	Power Conductor Stranding		Ground Check Conductor Size	Grounding conductor		Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O.D.		Approx. Weight	
		No. of Stranding			Size	Stranding			inches	mm	lbs/1000 ft	kg/km
	AWG				AWG	No. of Stranding	inches	inches	inches	mm	lbs/1000 ft	kg/km
SHDGC25KV2-3 Mining	2 AWG	259	7x37	8	6	133 7x19	0.295	0.235	2.95	74.9	5325	7925
SHDGC25KV1-3 Mining	1 AWG	259	7x37	8	5	133 7x19	0.295	0.265	3.05	77.5	5841	8691
SHDGC25KV1/0-3 Mining	1/0 AWG	266	19x14	8	4	259 7x37	0.295	0.265	3.20	81.3	6553	9747
SHDGC25KV2/0-3 Mining	2/0 AWG	342	19x18	8	3	259 7x37	0.295	0.280	3.33	84.6	7255	10797
SHDGC25KV3/0-3 Mining	3/0 AWG	418	19x22	8	2	259 7x37	0.295	0.280	3.40	86.4	7400	11011
SHDGC25KV4/0-3 Mining	4/0 AWG	532	19x28	8	1	259 7x37	0.295	0.295	3.50	88.9	8355	12434

ELECTRICAL AND MECHANICAL PARAMETERS

Power-Grounding Conductor Size	Power Conductor Resistance at 20°C	Grounding Conductor Resistance at 20°C	Ground Check Conductor Resistance at 20°C	Inductance per unit length	Operating Capacitance per unit length	Permissible Short-Circuit Current ⁽²⁾ (1s)	Ampacity ⁽¹⁾ 40°C Ambient Temp.	Maximum Permissible Tensile Force
AWG or MCM	Ω/1000Ft	Ω/1000Ft	Ω/1000Ft	mH/1000Ft	μF/1000Ft	kA	A	N
2 AWG – 6 AWG	0.172	0.436	0.679	0.142	0.05	4.80	178	1500
1 AWG – 5 AWG	0.137	0.349	0.679	0.137	0.06	6.06	191	1900
1/0 AWG – 4 AWG	0.109	0.274	0.679	0.132	0.06	7.65	218	2400
2/0 AWG – 3 AWG	0.0868	0.227	0.679	0.125	0.07	9.64	249	3000
3/0 AWG – 2 AWG	0.0688	0.172	0.679	0.124	0.07	12.15	286	3800
4/0 AWG – 1 AWG	0.0546	0.137	0.679	0.118	0.08	15.30	327	4800

(1) Ampacity- Free air measured; Based on continuous duty at 90°C conductor temperature

(2) Short-circuit current (1s) – Based on conductor temperature from 90°C up to 250°C

STANDARD PRINT LEGEND:

TELE-FONIKA 25000V (SIZE) TYPE SHD-GC P-07-KA060012-MSHA

