

TYPE SHD-GC 3/c 2kV

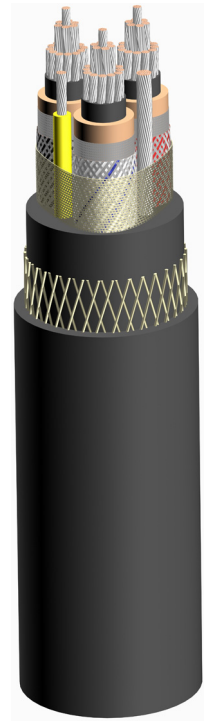
Three conductor Round portable power cable Mining grade

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
Insulation:	Ethylene-propylene rubber (EPR)
Insulation shield:	Non conducting bedding tape + composite tinned copper/fiber 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; Nylon open braid applied overall; Integral filled jacket for higher torsion resistance
Separator:	Polyester tape over conductor
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, water 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">- Use on AC off track equipment such as longwall miners loaders, drills, conveyors, pumps and mobile equipment requiring grounding conductors and a ground check conductor and metallic shielding overall- 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-7K-268101 (CPE), 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	
				Size	Stranding			inches	mm	lbs/1000ft	kgs/km
SHDGC2KV6-3 Mining	6 AWG	133 7x19	10	10	49 7x7	0.070	0.155	1.29	32.8	1056	1571
SHDGC2KV4-3 Mining	4 AWG	259 7x37	10	8	133 7x19	0.070	0.155	1.40	35.6	1400	2083
SHDGC2KV2-3 Mining	2 AWG	259 7x37	10	6	133 7x19	0.070	0.170	1.59	40.4	1848	2750
SHDGC2KV1-3 Mining	1 AWG	259 7x37	8	5	133 7x19	0.080	0.170	1.76	44.7	2350	3497
SHDGC2KV1/0-3 Mining	1/0 AWG	266 19x14	8	4	259 7x37	0.080	0.190	1.86	47.2	2700	4018
SHDGC2KV2/0-3 Mining	2/0 AWG	342 19x18	8	3	259 7x37	0.080	0.205	2.00	50.8	3241	4824
SHDGC2KV3/0-3 Mining	3/0 AWG	418 19x22	8	2	259 7x37	0.080	0.205	2.13	54.1	3800	5654
SHDGC2KV4/0-3 Mining	4/0 AWG	532 19x28	8	1	259 7x37	0.080	0.220	2.31	58.7	4349	6919
SHDGC2KV250-3 Mining	250 MCM	627 19x33	8	1/0	266 19x14	0.095	0.220	2.51	63.8	5750	8557
SHDGC2KV300-3 Mining	300 MCM	740 37x20	8	1/0	266 19x14	0.095	0.235	2.70	68.6	6602	9827
SHDGC2KV350-3 Mining	350 MCM	888 37x24	8	2/0	342 19x18	0.095	0.235	2.81	71.4	7200	10713
SHDGC2KV500-3 Mining	500 MCM	1221 37x33	8	4/0	532 19x28	0.095	0.265	3.19	81.0	9900	14731

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
6 AWG – 10 AWG	0.436	1.109	0.679	0.118	0.09	1.90	93	600
4 AWG – 8 AWG	0.274	0.697	0.679	0.107	0.11	3.03	122	950
2 AWG – 6 AWG	0.172	0.436	0.679	0.101	0.13	4.80	159	1500
1 AWG – 5 AWG	0.137	0.349	0.679	0.100	0.13	6.06	184	1900
1/0 AWG – 4 AWG	0.109	0.274	0.679	0.097	0.14	7.65	211	2400
2/0 AWG – 3 AWG	0.0868	0.227	0.679	0.092	0.16	9.64	243	3000
3/0 AWG – 2 AWG	0.0688	0.172	0.679	0.091	0.17	12.15	279	3800
4/0 AWG – 1 AWG	0.0546	0.137	0.679	0.088	0.19	15.30	321	4800
250 MCM – 1/0 AWG	0.0466	0.109	0.436	0.084	0.21	18.16	355	5800
300MCM - 1/0 AWG	0.0389	0.109	0.436	0.083	0.22	21.74	395	6825
350 MCM – 2/0 AWG	0.0333	0.0868	0.436	0.081	0.24	25.31	435	7900
500 MCM – 4/0 AWG	0.0233	0.0546	0.436	0.078	0.28	36.18	536	11400

(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 2000V (SIZE) TYPE SHD-GC P-07-KA060012-MSHA

