Table 1. Schematic Diagram and Minimum-Size Control Wires for Series 2000 Circuit-Switchers

Schematic diagram (wiring to be furnished by user)													
S&C Series 2000 Circuit-Switcher operator													
	Circuit-	Motor	Motor	Trip Coil and	Minimum Size of Control Wire③ for Lines L1 and L2 Respectively, A.W.G.								
Operator	Circuit-	Motor	Motor	Trip Coil and		fe	Minir or Lines	num Siz L1 and	e of Co L2 Res	ntrol Wi pectively	re③ y, A.W.G		
Operator Control Voltage	Circuit- Switcher Catalog	Motor Inrush Current,	Motor Running Current,	Trip Coil and Closing Coil Current,		fe	Minir or Lines	num Siz L1 and E	ze of Co L2 Res Distance	ntrol Wi pectively , Feet (n	re③ y, A.W.G n)		
Operator Control Voltage	Circuit- Switcher Catalog Number Suffix	Motor Inrush Current, Amperes	Motor Running Current, Amperes	Trip Coil and Closing Coil Current, Amperes	Line	fo 100 (30)	Minir or Lines 200 (61)	num Siz L1 and C 300 (91)	e of Co L2 Res Distance 400 (122)	ntrol Wi pectively , Feet (n 500 (152)	re③ y, A.W.G n) 1000 (305)	2000 (610)	3000 (914)
Operator Control Voltage	Circuit- Switcher Catalog Number Suffix	Motor Inrush Current, Amperes	Motor Running Current, Amperes	Trip Coil and Closing Coil Current, Amperes	Line	fe 100 (30) 6	Minir or Lines 200 (61) 4	num Siz L1 and 2 300 (91) 2	2e of Co L2 Resp Distance 400 (122) 1	ntrol Wi pectively , Feet (n 500 (152) 1/0	re ③ y, A.W.G n) 1000 (305) 4/0	2000 (610)	3000 (914)
Operator Control Voltage 48 Vdc	Circuit- Switcher Catalog Number Suffix -A	Motor Inrush Current, Amperes 73	Motor Running Current, Amperes 40	Trip Coil and Closing Coil Current, Amperes	Line L1 L2	fr 100 (30) 6 12	Minir or Lines 200 (61) 4 10	num Siz L1 and 300 (91) 2 8	2 of Co L2 Res Distance 400 (122) 1 6	Solution Solution , Feet (n 500 (152) 1/0 6	re ③ y, A.W.G n) 1000 (305) 4/0 2	2000 (610)	3000 (914)
Operator Control Voltage 48 Vdc	Circuit- Switcher Catalog Number Suffix -A	Motor Inrush Current, Amperes 73	Motor Running Current, Amperes 40	Trip Coil and Closing Coil Current, Amperes 22	Line L1 L2 L1	fr 100 (30) 6 12 12	Minir 200 (61) 4 10 10	num Siz L1 and 300 (91) 2 8 8	e of Co L2 Res Distance 400 (122) 1 6 6	ntrol Wii pectively , Feet (n 500 (152) 1/0 6 6	re③ y, A.W.G n) 1000 (305) 4/0 2 3	2000 (610) 1/0	3000 (914) 3/0
Operator Control Voltage 48 Vdc 125 Vdc	Circuit- Switcher Catalog Number Suffix -A -B	Motor Inrush Current, Amperes 73 28	Motor Running Current, Amperes 40 15	Trip Coil and Closing Coil Current, Amperes 22 8.5	Line L1 L2 L1 L2	fr 100 (30) 6 12 12 12 12	Minir 200 (61) 4 10 10 12	num Siz L1 and 300 (91) 2 8 8 8 8	e of Co L2 Res Distance (122) 1 6 6 12	ntrol Wipectively , Feet (n (152) 1/0 6 6 10	re ③ y, A.W.G n) 1000 (305) 4/0 2 3 8	2000 (610) 1/0 6	3000 (914) 3/0 4
Operator Control Voltage 48 Vdc 125 Vdc 115 V	Circuit- Switcher Catalog Number Suffix -A -B	Motor Inrush Current, Amperes 73 28 28 28 BMS	Motor Running Current, Amperes 40 15	Trip Coil and Closing Coil Current, Amperes 22 8.5 6 BMS	Line L1 L2 L1 L2 L1	fr 100 (30) 6 12 12 12 12 12	Minir 200 (61) 4 10 10 12 10	num Siz L1 and 300 (91) 2 8 8 8 12 8	ee of Co L2 Res Distance 400 (122) 1 6 6 12 6	ntrol Wipectively , Feet (n 500 (152) 1/0 6 10 6	re③ y, A.W.G n) 1000 (305) 4/0 2 3 8 3	- 2000 (610) 1/0 6 1/0	3000 (914) 3/0 4 3/0

1 Recommended minimum one-minute discharge rate of battery to 1.75 Volts per cell: 75 amperes.

O Recommended voltage regulation of ac control source: 5% or better at 15 amperes.

③ Where long distances and large wire sizes are encountered, comparative cost of relocating the battery and protective relay closer to the operator should be considered.

Table 2: Minimum and Maximum Control Source Voltage

Operator Control Voltage	Circuit-Switcher Catalog Number Suffix	Maximum Control Source Voltage	Minimum Control Source Voltage	Minimum Tripping② Source Voltage
48 Vdc	-A	56 Vdc	36 Vdc	28 Vdc
125 Vdc	-В	140 Vdc	90 Vdc	70 Vdc

① As measured at the Series 2000 operator's terminal blocks.

(2) Only for the trip coil(s), and does not include motor charging and closing circuits.

