

Crane Control Class 9998

Catalog

03



CRANE CONTROL
CLASS 9998

CONTENTS

Description	Page
DC Coil Data	152
Replacement Parts Kits	155



The Electric Controller and
Manufacturing Company, LLC

**Crane Control Class 9998
DC Coil Data**

DC COIL DATA FOR CLASS 7001 TYPE K RELAYS

DC operating coils are designed in accordance with NEMA Standards to withstand 110% of rated voltage continuously and to operate the contactor successfully at 80% of rated voltage.

Standard DC Operating Coils for Class 7001 Type K Relays

Full Shunt Coils

Class 7001 Device Type	Coil Number	VDC	Coil Resistance Ohms @ 20 °C †	Coil Amperes @ 20 °C †
KG, KE, KF	5101706750	300	2050	0.146
	5101705650	230-240	1619	0.148
	5101706752	190	863	0.222
	5101706753	150	547	0.274
	5101705651	115-120	415	0.294
	5101706755	100	226	0.442
	5101706756	75	140	0.536
	5101706757	60	87	0.690
	5101706758	45	57	0.789
	5101706759	36	36	1.000
	5101706760	24	12.8	1.880
	5101706761	12	3.5	3.43

Half Shunt Coils

Devices Using Coil Type	Coil Number	VDC	Coil Resistance Ohms @ 20 °C †	Coil Amperes @ 20 °C †
KF	5115204450	230-240	1828	0.131
	5115204451	115-120	477	0.252

† At normal operating temperature the coil resistance will increase by approximately 20%

Price Information – Consult EC&M.

DC COIL DATA FOR CLASS 7001 TYPE K RELAYS

Full Series Coils

Class 7001 Device Type	Coil Number	Coil Resistance Ohms @ 20 °C †	Coil Amperes @ 20 °C †
KI, KF	5115207750	177	0.39
	5115207751	110	0.49
	5115207752	71.2	0.62
	5115207753	45.6	0.77
	5115207754	28.6	0.97
	5115207755	16.6	1.2
	5115207756	10.4	1.6
	5115207757	6.67	2.0
	5115207758	4.46	2.4
	5115207759	2.76	3.1
	5115207760	1.78	3.8
	5115207761	1.08	4.9
	5115207762	0.69	6.1
	5115207763	0.43	7.3
	5115207764	0.27	9.9
	5115207850	–	12.5
	5115207851	–	16.0
	5115207852	–	20.8
	5115207853	–	26.6
	5115207854	–	35.2
	5115207855	–	45.3
	5115207856	–	58.0
	5115207857	–	75.6
	5115207858	–	114.5
	5115207902	–	171.5
	5115207903	–	257.5
5115207904	–	200.0	

Half Series Coils

Devices Using Coil Type	Coil Number	Coil Resistance Ohms @ 20 °C †	Coil Amperes @ 20 °C †
KI, KF	5115203650	–	7.36
	5115203651	–	11.71
	5115203652	–	18.75
	5115203653	–	29.45
	5115203654	–	46.90
	5115203655	–	73.60
	5115203301	–	114.5
	5115203302	–	171.5
	5115203303	–	257.5

Coils with External Diode

Devices Using Coil Type	Coil Number ▲	System Volts	Coil Volts	Coil Ohms @ 20 °C †	Coil Amps @ 20 °C †	Reverse Ohms ● @ 20 °C †
KP	5101705651	240	120	407	0.294	1MEG
	5101705659	120	60	107	0.561	1MEG

- ▲ Does not include external diode. Diode P/N is 5122902950.
- Reverse ohms can only be measured when externally mounted diode is in series with coil.
- † At normal operating temperature the coil resistance will increase by approximately 20%.

Price Information – Consult EC&M.



Crane Control Class 9998
DC Coil Data

DC COIL DATA FOR CLASS 7004 AND 8503 TYPE M CONTACTORS

DC operating coils are designed in accordance with NEMA Standards to withstand 110% of rated voltage continuously and to operate the contactor successfully at 80% of rated voltage.

Standard DC Operating Coils for Class 7004 and 8503 Type M Contactors

Class 7004 and 8503 Device			VDC	Coil Part Number	Coil Resistance Ohms @ 20 °C †	Coil Amperes @ 20 °C †
Size	Type	Poles				
1 & 2	MXCO1, MXDO1 MXCO3, MXDO3	SPNO SPNC	300	5101505654	3910	0.077
			230-240	5101505650	2133	0.113
			190	5101505655	1515	0.125
			150	5101505656	940	0.160
			115-120	5101505651	613	0.196
			100	5101505657	397	0.252
			75	5101505658	257	0.292
			60	5101505659	166	0.361
			45	5101505660	103	0.437
			36	5101505661	65	0.554
			24	5101505662	27.5	0.873
			12	5101505663	7.35	1.63
3 & 4	MEO1, MFO1 MEO3, MFO3	SPNO SPNC	300	5101705654	2734	0.110
			230-240	5101705650	1712	0.140
			190	5101705655	1135	0.167
			150	5101705656	706	0.212
			115-120	5101705651	415	0.289
			100	5101705657	312	0.321
			75	5101705658	181	0.414
			60	5101705659	122	0.492
			45	5101705660	65	0.692
			36	5101705661	45	0.800
			24	5101705662	19.7	1.22
			12	5101705663	5.20	2.31
5 & 5A	MGAO1, MGO1 MGAO3, MGO3	SPNO SPNC	300	5101924352	1960	0.153
			230-240	5101924353	1240	0.194
			190	5101924354	801	0.237
			150	5101924355	520	0.288
			115-120	5101924356	315	0.381
			100	5101924357	242	0.413
			75	5101924358	137	0.547
			60	5101924359	89	0.674
			45	5101924360	45	1.00
			36	5101924361	31	1.16
			24	5101924362	14.5	1.66
			12	5101924363	3.9	3.08
6 & 6A	MHAO1, MHO1 MHO3	SPNO SPNC	300	5102024352	1097	0.273
			230-240	5102024353	720	0.333
			190	5102024354	439	0.433
			150	5102024355	284	0.528
			115-120	5102024356	177	0.678
			100	5102024357	114	0.877
			75	5102024358	74	1.01
			60	5102024359	42.3	1.42
			45	5102024360	27.5	1.64
			36	5102024361	17.8	2.02
			24	5102024362	6.78	3.54
			12	5102024363	1.81	6.63
7 & 8	MJO1, MKO1 MJO3, MKO3	SPNO SPNC	300	5102205670	639	0.469
			230-240	5102205671	401	0.599
			190	5102205672	259	0.734
			150	5102205673	159	0.943
			115-120	5102205674	94	1.28
			100	5102205675	61	1.64
			75	5102205676	37.9	1.98
			60	5102205677	24.0	2.50
			45	5102205678	15.2	2.96
			36	5102205679	9.9	3.64
			24	5102205680	6.0	4.00
			12	5102205681	1.4	8.57

† At normal operating temperature the coil resistance will increase by approximately 20%

CRANE CONTROL
CLASS 9998



Crane Control Class 9998 Replacement Parts Kits

Price Information – Refer to “Repair Parts Price List,” or consult your Local Square D Field Office.

FOR MAGNET CONTROLLERS AND AC AND DC TYPE M AND MX CONTACTORS

Copper contact tips are standard. Silver-faced contact tips are available and are recommended for applications where the contactors remain closed for long periods of time. Silver-faced contact tips are standard on crane manual-magnetic disconnect switches and are optional on DC starters. Each kit contains movable and stationary contacts, necessary hardware and servicing instructions.

Copper Contact Tips

Equipment to be Maintained			Number of Poles in Kit	Parts Kit Type	Price
Class	Type	Contactor Size			
6815 Magnet Controllers	AD-01 through AD-04 (2-19 A)	...	▲	MA1	\$ 257.
	AD-13 through AD-16 (19-130 A)	...	▲	MA2	248.
	SD-20 through SD-29 (2-30 A)	...	▲	MA3	122.
	SD-30 through SD-39 (31-80 A)	...	▲	MA4	122.
	SD-40 through SD-49 (81-130 A)	...	▲	MA5	183.
7004 DC Contactors and 8503 AC Contactors	MX	1 & 2	2	MX1	129.
	MX	3	2	MX3	273.
	M	3	2	ME1	105.
	M	4	2	MF1	117.
	M	5 & 5A	2	MG1	153.
	M	6 & 6A	2	MH1	309.
	M	7 & 8	2	MJK1	534.

▲ Each kit contains complete set of parts to change contacts on both “Lift” and “Drop” contactors.

Silver Contact Tips

Equipment to be Maintained			Number of Poles in Kit	Parts Kit Type	Price
Class	Type	Contactor Size			
7004 DC Contactors and 8503 AC Contactors	MX	1 & 2	2	MX2	\$ 714.
	M	3	2	ME2	1149.
	M	4	2	MF2	1188.
	M	5 & 5A	2	MG2	1662.
	M	6 & 6A	2	MH2	1995.
	M	7 & 8	2	MJK2	3324.

Ordering Information Required:

1. Class
2. Type

CP9C Discount Schedule

