

Carlyle 06D and 06CC RLA Values

Carlyle is announcing an improvement in the Rated Load Ampere (RLA) values used with all 06D and 06CC ("D" body) OEM compressors. In the past we have used two values, a higher value for contactor selection and a lower value for wire sizing and other branch circuit component selection. We are standardizing on the lower values that as shown.

All Carlyle 06D and 06CC ("D" body) compressors that are supplied with supplementary overloads in the compressor terminal box and internal thermostats in the motor comply with UL & NEC definitions of inherent thermal protection

The definition of the motor protection determines what factor is used in calculating RLA from the Maximum Continuous Current (MCC) determined from motor protection tests. Section 4 of the 06D/E Application Manual should be reviewed for a more complete discussion of the MCC and RLA code definitions.

Carlyle 06D and 06CC ("D" body) compressors meeting the thermally protected definition have the term "Thermally Protected" printed on the nameplate and are allowed to use a 156% factor in determining minimum RLA values. In the past, Carlyle has published a more conservative RLA value using a 140% factor. An example of how these factors are applied is shown below using the 06DR228, 208/230 compressor:

Using 140% factor:

$$RLA = MCC \div 1.40 = 55.5 \div 1.40 = 39.6 \text{ amps}$$

Using 156% factor:

$$RLA = MCC \div 1.56 = 55.5 \div 1.56 = 35.6 \text{ amps}$$

Carlyle now recommends using the 156% factor in determining RLA values for all electrical wiring and component selections. This will also assist the OEM unit manufacturer in lowering the system RLA values while still complying with the UL and NEC codes.

06CC "D BODY" ELECTRICAL SPECIFICATIONS

Compressor Model	Volts	HP	MCC	RLA	LRA
06CC016J101	575		10.8	6.9	40
D101	208/230	5	27	17.3	100
G101	460		13.5	8.7	50
06CC018J101	575		10.8	6.9	40
D101	208/230	5	27	17.3	100
G101	460		13.5	8.7	50
06CC124J101	575		13.2	8.5	64
D101	208/230	6.5	33	21.2	160
G101	460		16.5	10.6	80
06CC228J101	575		16.7	10.7	79
D101	208/230	7.5	41.6	26.7	198
G101	460		20.9	13.4	99
06CC337J101	575		18.8	12.1	91
D101	208/230	10	46.5	29.8	228
G101	460		23.3	14.9	114

06D ELECTRICAL SPECIFICATIONS

Compressor Model	Volts	HP	Max kW	MCC	RLA	LRA
06DR1090GA31*0 GA32*0 GA36*0	575 208/230 460	2	3.1	4.4 12.1 5.5	2.8 7.6 3.5	21.3 53.3 26.3
06DR0130CA31*0 CA32*0 CA36*0	575 208/230 460	3	4.3	7.0 17.4 8.7	4.5 11.2 5.6	28.4 71.0 35.5
06DR3160CA31*0 CA32*0 CA36*0	575 208/230 460	5	6.25	10.8 27.0 13.5	6.9 17.3 8.6	40.0 100.0 50.0
06DR7180DA31*0 DA32*0 DA36*0	575 208/230 460	5	6.25	10.8 27.0 13.5	6.9 17.3 8.6	40.0 100.0 50.0
06DR8200DA31*0 DA32*0 DA36*0	575 208/230 460	6.5	9.8	17.6 44.0 22.0	11.3 28.2 14.1	64.0 160.0 80.0
06DR7240DA31*0 DA32*0 DA36*0	575 208/230 460	6.5	9.8	17.6 44.0 22.0	11.3 28.2 14.1	64.0 160.0 80.0
06DR2280DA31*0 DA32*0 DA36*0	575 208/230 460	7.5	12.8	22.2 55.5 27.8	14.2 35.6 17.8	79.0 198.0 99.0
06DR3370DA31*0 DA32*0 DA36*0	575 208/230 460	10	16.5	25.0 62.0 31.0	16.0 39.7 19.9	91.0 228.0 114.0
06DM8080GA31*0 GA32*0 GA36*0	575 208/230 460	3	4.1	7.0 17.4 8.7	4.5 11.2 5.6	28.4 71.0 35.5
06DM3130CA31*0 CA32*0 CA36*0	575 208/230 460	5	6.25	10.8 27.0 13.5	6.9 17.3 8.6	40.0 100.0 50.0
06DM3160CA31*0 CA32*0 CA36*0	575 208/230 460	5	6.25	10.8 27.0 13.5	6.9 17.3 8.6	40.0 100.0 50.0
06DM3370DA31*0 DA32*0 DA36*0	575 208/230 460	10	16.5	25.0 62.0 31.0	16.0 39.7 19.9	91.0 228.0 114.0
06DA8182AA31*0 AA32*0 AA36*0	575 208/230 460	6.5	9.78	17.6 44.0 22.0	11.3 28.2 14.1	64.0 160.0 80.0
06DA8242BA31*0 BA32*0 BA36*0	575 208/230 460	7.5	12.8	22.2 55.5 27.8	14.2 35.6 17.8	79.0 198.0 99.0
06DA3282BA31*0 BA32*0 BA36*0	575 208/230 460	10	16.5	25.0 62.0 31.0	16.0 39.7 19.9	91.0 228.0 114.0
06DA5370BA01*0 BA12*0 BA06*0	575 208/230 460	15	20.7	32.0 89.0 40.0	20.5 57.1 25.6	96.0 266.0 120.0