Hazardous Duty Motors (NEMA Size 42 & 66)

- Motor torque up to 1500 oz-in (1059 N-cm)
- 72 RPM @ 60 Hz - 60 RPM @ 50 Hz
- 120 and 240 volt AC versions
- UL Listed and CE certified versions
- UL Listed versions - Class 1 Group D requirements
- UL Listed versions have conduit connection
- CE certified versions – EEx d IIC T5
- CE certified versions have integral 10 ft (3 M) cable

X
XCE

X	Meets UL Standards (conduit connection)
XCE	Meets CE Standards (includes 10' (3m) cable)

Torque in oz-in, and
Last # indicates voltage
0 120 volts
2 240 volts
X250=250 oz-in, 120 V
X1102=1100 oz-in, 240 V

UL Certified Motors (Prefix "X")

Motors having an "X" prefix (X250, etc.) are designed to meet UL Standard 674 for motors operating in Class 1 Group D hazardous locations.

Class 1 is defined as locations in which gases or vapors are, or may be, present in the air in quantities sufficient to produce explosions or ignitable mixtures. Group D includes atmospheres containing gasoline, petroleum, naphtha, alcohol, acetone, lacquer solvent vapors or natural gas.

CE Certified Motors (Prefix "XCE")

Motors having a "XCE" prefix are designed to meet requirements in hazardous locations as defined by CE directive 94/9/EC. They have a flameproof enclosure, for use in surface industries exposed to gasses including hydrogen and acetylene. The maximum surface temperature is 100°C.

Hazardous Duty Motors (Continued)

120 Volt, 60 Hz, Single Phase, 72 RPM

* Type Number		Torque (min)		# Load Inertia		amps	Wiring Diagram	Phase Shifting				
								Resistor			Capacitor (330VAC)	
UL	CE	oz-in	N-cm	lb-in^2	kg-cm			Kit Number	ohms	watts	Kit Number	µF
X250	XCE250	250	177	3	8.8	0.6	RC	201052-013	150	50	201053-010	6.5
X700	XCE700	700	494	10	30	1.1	RC	201052-027	150	100	201053-032	12.5
X1100	XCE1100	1,100	777	9	26	3	RC	201052-025	100	160	201053-026	17.5
X1500	XCE1500	1,500	1,059	12	35	3	RC	201052-020	55	375	201053-014	30

240 Volt, 60 Hz, Single Phase, 72 RPM

* Type Number		Torque (min)		# Load Inertia		amps	Wiring Diagram	Phase Shifting				
								Resistor			Capacitor (660VAC)	
UL	CE	oz-in	N-cm	lb-in^2	kg-cm			Kit Number	ohms	watts	Kit Number	µF
X252	XCE252	250	177	3	8.8	0.4	RC	201052-015	500	50	201053-012	1.75
-----	XCE702	700	494	10	30	0.6	RC	201052-028	500	100	201053-030	3
X1102	XCE1102	1,100	777	9	26	1.5	RC	201052-026	400	160	201053-028	4
X1502	XCE1502	1,500	1,059	12	35	1.5	RC	201052-018	250	200	201053-016	8

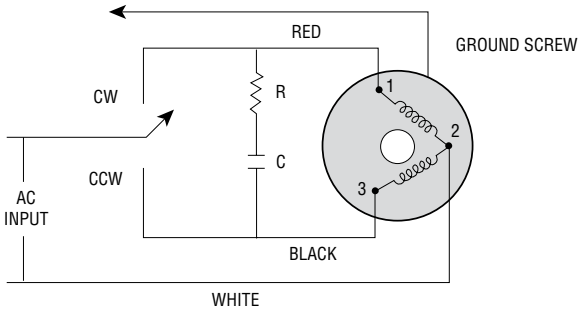
240 Volt, 50 Hz, Single Phase, 60 RPM

* Type Number		Torque (min)		# Load Inertia		amps	Wiring Diagram	Phase Shifting				
								Resistor			Capacitor (660VAC)	
UL	CE	oz-in	N-cm	lb-in^2	kg-cm			Kit Number	ohms	watts	Kit Number	µF
X252	XCE252	250	177	3	8.8	0.4	RC	201052-015	500	50	201053-012	1.75
-----	XCE702	700	494	10	30	0.6	RC	201052-028	500	100	201053-028	4
X1102	XCE1102	1,100	777	9	26	1.5	RC	201052-026	400	160	201053-029	6
X1502	XCE1502	1,500	1,059	12	35	1.5	RC	201052-018	250	200	201053-019	9

This is the maximum rigidly attached load inertia the motor will reliably start. If the load is attached to the motor with a coupling that has a 5° flex, the motor can start loads up to seven times listed.

Connection Diagram

R/C Connection

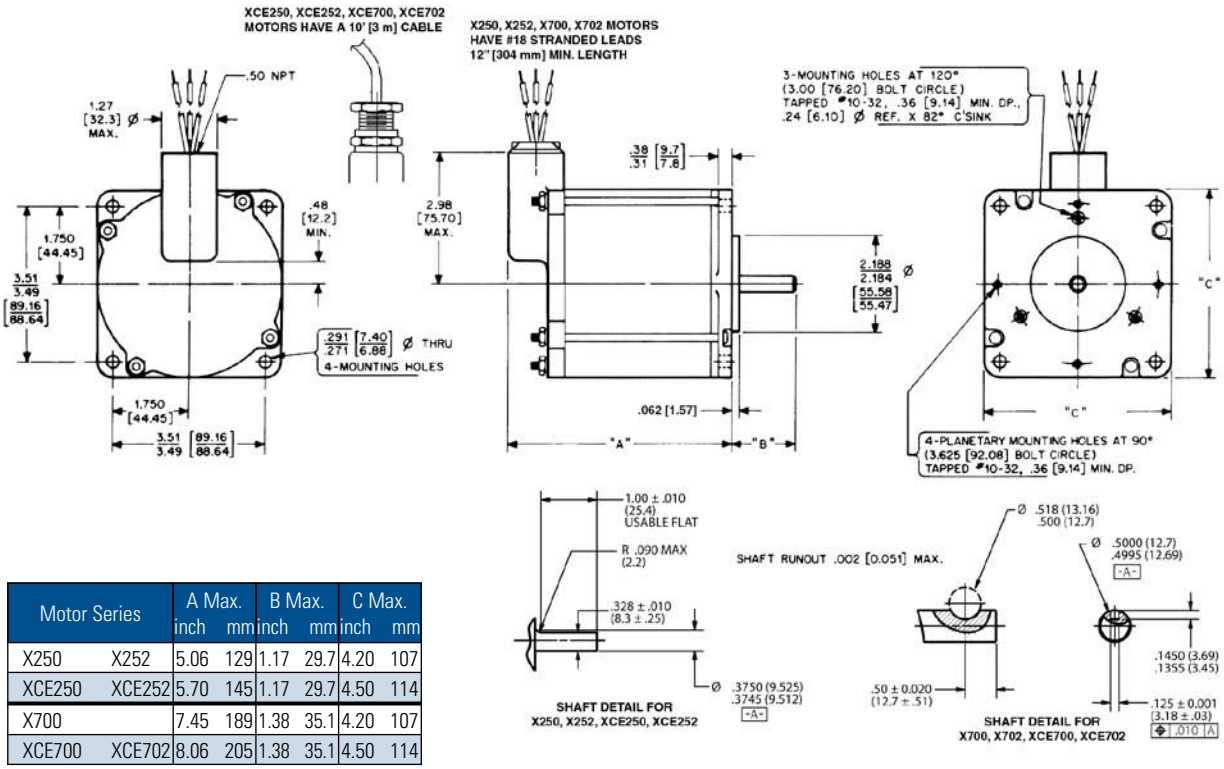


NOTE:
1 - Direction or rotation is determined when viewed from end opposite mounting surface.

Single-Phase Operation

Hazardous Duty Motor Dimensions

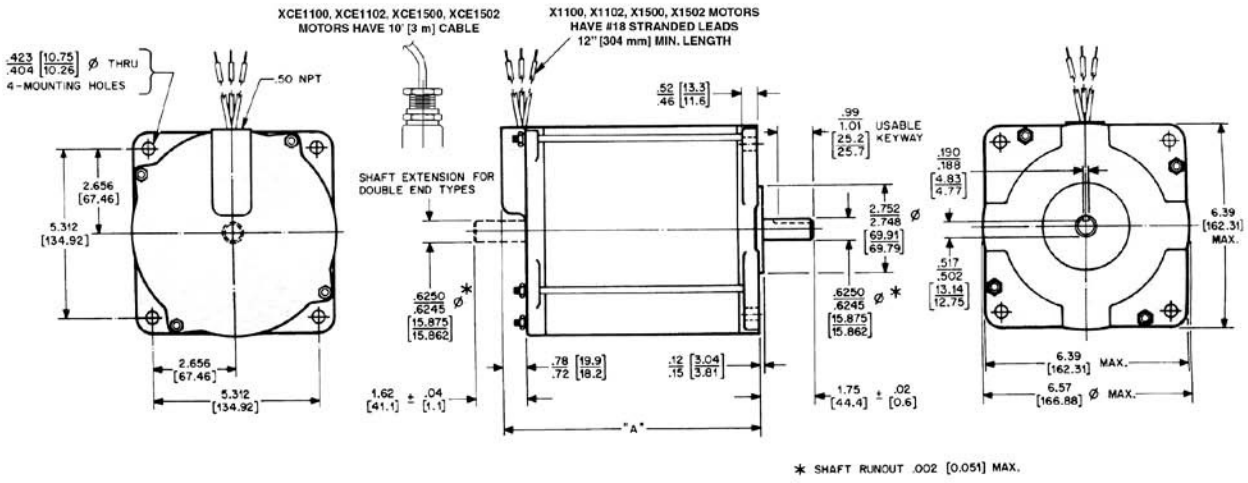
X250, X252, X700, X2CE250, XCE252, XCE700, XCE702



Motor Series		A Max. inch	A Max. mm	B Max. inch	B Max. mm	C Max. inch	C Max. mm
X250	X252	5.06	129	1.17	29.7	4.20	107
XCE250	XCE252	5.70	145	1.17	29.7	4.50	114
X700		7.45	189	1.38	35.1	4.20	107
XCE700	XCE702	8.06	205	1.38	35.1	4.50	114

Dimensions are shown in inches (mm)

X1100, X1102, X1500, X1502, XCE1100, XCE1102, XCE1500, XCE1502



Motor Series		A Max. inch	A Max. mm
X1100	X1102	7.10	180
XCE1100	XCE1102	7.60	193
X1500	X1502	8.41	2.14
XCE1500	XCE1502	8.91	226

Dimensions are shown in inches (mm)

Phase Shifting Components

Capacitor Kits

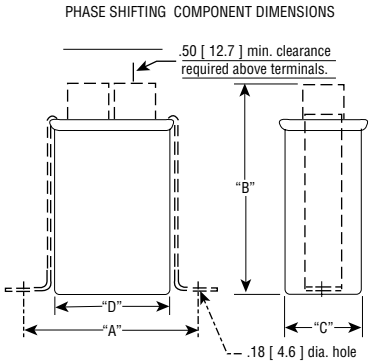


FIGURE C1

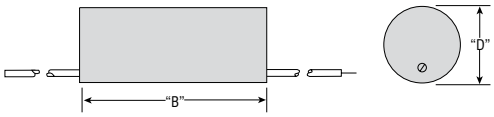
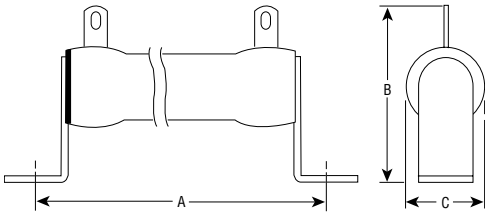


FIGURE C2

Kit Number	Figure	µfd	VAC	A		B		C		D	
				in	mm	in	mm	in	mm	in	mm
201053-010	C1	6.5	330	2.66	67.6	4.14	105	1.31	33	2.16	55
201053-012	C1	1.75	660	2.66	67.6	3.77	96	1.31	33	2.16	55
201053-014	C1	30	330	3.41	86.6	7.56	192	1.91	49	2.91	74
201053-016	C1	8	660	3.41	86.6	5.81	148	1.91	49	2.91	74
201053-019	C1	9	660	4.16	105.7	5.81	148	1.97	50	3.66	93
201053-026	C1	17.5	330	3.41	86.6	4.84	123	1.91	49	2.91	74
201053-028	C1	4	660	2.66	67.6	3.7	94	1.31	33	2.16	55
201053-029	C1	6	660	2.66	67.6	4.83	123	1.31	33	2.16	55
201053-030	C1	3	660	2.66	67.6	4.08	104	1.31	33	2.16	55
201053-032	C1	12.5	330	2.66	67.6	6.08	154	1.31	33	2.16	55
201053-037	C2	7.5	250	-	-	2.0	51	-	-	1.10	28
201053-038	C2	2	250	-	-	2.0	51	-	-	0.66	17
201053-041	C2	2.5	250	-	-	2.0	51	-	-	0.67	17
201053-042	C2	14	250	-	-	2.5	64	-	-	1.15	29
201053-044	C2	3	250	-	-	2.0	51	-	-	0.68	17
201053-061	C2	4	250	-	-	2.0	51	-	-	0.81	21
201053-063	C1	0.75	370	2.66	67.6	2.79	71	1.31	33	2.16	55
201053-068	C2	1.5	250	-	-	2.0	51	-	-	0.66	17
201053-069	C2	6	250	-	-	2.0	51	-	-	1.10	28
201053-070	C1	1	370	2.66	67.6	2.79	71	1.31	33	2.16	55
201053-071	C1	1.75	370	2.66	67.6	2.79	71	1.31	33	2.16	55
201053-072	C1	2	370	2.66	67.6	2.79	71	1.31	33	2.16	55
201053-073	C1	3	370	2.66	67.6	2.79	71	1.31	33	2.16	55
201053-074	C2	11	250	-	-	2.0	51	-	-	1.30	33
201053-075	C1	1.5	370	2.66	67.6	2.79	71	1.31	33	2.16	55
201053-076	C2	5	250	-	-	2.0	51	-	-	1.10	28
201053-081	C1	20	330	3.41	86.6	6.09	155	1.91	49	2.91	74
201053-082	C1	7.5	660	3.41	86.6	5.81	148	1.91	49	2.91	74

Resistor Kits



Kit Number	ohms	watts	A		B		C	
			in	mm	in	mm	in	mm
201052-013	150	50	4.88	124	1.44	37	1	25.4
201052-015	500	50	4.88	124	1.44	37	1	25.4
201052-018	250	200	11.5	292	2.75	70	1.13	28.7
201052-020	55	375	11.5	292	2.69	68.3	1.25	31.8
201052-025	100	160	9.38	238	2.5	64	1.13	28.7
201052-026	400	160	9.38	238	2.5	64	1.13	28.7
201052-027	150	100	5.88	150	2.76	70	1.38	35
201052-028	500	100	5.88	150	2.76	70	1.38	35
201052-033	1,000	12	2.5	64	0.94	24	0.32	8.1
* 201052-034	600	12	2.5	64	0.94	24	0.32	8.1
201052-035	600	25	3	76	1.94	50	0.75	19
* 201052-036	1,100	25	3	76	1.94	50	0.75	19
201052-037	300	50	4.88	124	1.44	37	1	25.4
* 201052-039	900	50	4.88	124	1.44	37	1	25.4
201052-041	250	50	4.88	124	1.44	37	1	25.4
* 201052-043	600	50	4.88	124	1.44	37	1	25.4
201052-045	1,000	100	5.88	150	2.76	70	1.38	35
* 201052-046	400	100	5.88	150	2.76	70	1.38	35
201052-047	600	100	5.88	150	2.76	70	1.38	35
201052-049	400	50	4.88	124	1.44	37	1	25.4
* 201052-050	1,000	25	3	76	1.94	50	0.75	19
201052-101	75	100	5.88	150	2.76	70	1.38	35
201052-102	200	100	5.88	150	2.76	70	1.38	35
201052-103	250	100	5.88	150	2.76	70	1.38	35
201052-104	50	200	11.5	292	2.75	70	1.13	28.7
201052-105	200	200	11.5	292	2.75	70	1.13	28.7
201052-106	150	200	11.5	292	2.75	70	1.13	28.7

* Kit contains two resistors. Dimensions shown are for one resistor.