

Regal AC Motor Selection – Marathon® & Leeson® 1-phase Motors



marathon®
Motors

Regal 1-phase Motor Selection					
Series	SST Duck	White Duck	JetPump	General Purpose	Fan & Blower
Electrical Characteristics					
Brand	Leeson®	Leeson®	Marathon	Marathon	Marathon
Horsepower range	1/3 – 1	1/3 – 1	1/3 – 2	1/4 – 10	1/4 – 2
Base speed (# poles)	1800 (4)	1800 (4) / 3600 (2)	3600 (2)	1800 (4) / 3600 (2)	1800 (4) / 3600 (2)
Standard voltage	115 / 230	115/208-230	115 / 230	115 / 230, 208 / 230, 115 / 208 – 230 100 –120 / 200 – 240, 120 / 140 & 100 – 120 / 200 – 240	115 / 230 (G1115), 115 / 208 – 230
Phase / Base frequency (Hz)	1 / 60				
Service factor	1.15	1.15	1.0 / 1.15	1.15 / 1.35	1.15 / 1.2 / 1.25 / 1.35
Design code (NEMA)	N	N	N/A***	B, L, N, O	E, L, N
Insulation class	F	F	B	B, B3, F4	B, B3
Insulation system	IRIS	IRIS	N/A***	N/A***	N/A***
Duty cycle	Continuous				
Thermal protection	None	None	Automatic Reset	Automatic / Manual / None	Automatic / Manual / None (C235)
Mechanical Characteristics					
Frame size (mounting)	56C	56 - 56C	56J	48 – 215T	48 – 56 – 56H
Enclosure	TEFC	TEFC	TEFC	DP	DP
Frame material	300 Series Stainless Steel	White Epoxy Steel	Rolled Steel	Rolled Steel	Rolled Steel
End bracket material	300 Series Stainless Steel	White Epoxy Steel	Cast Aluminum, Steel	Cast Aluminum	Cast Aluminum
Conduit box material	300 Series Stainless Steel	White Epoxy/Stainless Cover	Steel	Steel	N/A***
Fan guard material	300 Series Stainless Steel	White Polypropylene	Steel	N/A***	N/A***
Fan material	Polypropylene	Composite	Plastic	N/A***	N/A***
Lead termination	Conduit box	Conduit box	Conduit box Flying Leads (Jxxx Models) .33HP to 3HP	Conduit box	NPS Hole
Standard mounting	C-Face with Rigid Base	C-Face with Rigid Base & C-face	Footless	Rigid Base	Resilient Base
Drive end shaft slinger	No	No	Yes	No	No
Paint	N/A	White Epoxy	Gray powder-coat	Gray powder-coat Blue enamel	Black powder-coat
Bearings	Double Sealed			Ball Bearings	Ball Bearings
Grease	Exxon Polyrex EM				
Standard conduit box assembly position	F1	F1	F1	F1	F1 (NPS Hole)
Performance Characteristics					
Temperature rise	N/A***				
Encoder provisions	No				
Other Characteristics					
Warranty *	12 months from Installation. 18 months from Purchase.				
Agency listings **	UL Recognized, CSA Certified, and CE Mark				

* See Terms and Conditions for motor warranty explanation.

Marathon warranty service can be arranged through Rexnord Regal service centers. See list of service centers on our website at www.automationdirect.com.

** To obtain the most current agency approval information, see the Agency Approval Checklist on the specific part number's web page.

*** Data not available from manufacturer.

marathon[®] Motors Jet Pump (Centrifugal), 1-phase Totally Enclosed Motors

C-Face Footless, 56J



Features

- Service Factor is 1.0 or 1.5, depending on model
- Double-sealed ball bearings, mechanically locked on shaft end
- Capacitor start/capacitor run design for higher efficiency, as noted
- Automatic reset thermal protector
- 416 stainless steel threaded shaft with slinger (NEMA 56 frame)
- Drip cover not included
- UL Recognized and CSA Certified

Applications

- Typical uses include: jet pumps and jet pump motor replacements.

Motor Shipping Schedule *

Same or one day * Up to 7 days Up to 10 days

Color indicates shipping lead time in business days. Check stock status online.

* Certain heavy and oversized items can be shipped only via LTL.

Check our website for current shipping method constraints by part number.

Motor Specifications – Jet Pump (Centrifugal) 1-phase Totally Enclosed Motors

Part Number*	Price	HP	Base RPM	Volts	Encl.	NEMA Design	NEMA Frame	Model No.	Weight (lb)*	Footnotes	Drawing Links
C1336	\$396.00	1/3	3600	115/230	TEFC	N/A**	56J	5KC33FN4180X	13.5	None	PDF
C465	Retired	1/2				N/A**		5KC39QN3218X	24.5	15 Model on nameplate may be 5KC39QN3218GX	PDF
C352	Retired	1				N/A**		5KC49NN2135X	29	15	PDF
C878	Retired	2				N/A**		5KCR49TN2164T	38	ES,1,15	PDF

* Refer to the Motor Shipping Schedule table for shipping information.

Certain heavy and oversized items can be shipped only via LTL. Check our website for current shipping method constraints by part number.

** Data not available from manufacturer.

Footnotes: 1 = Capacitor Start/Capacitor Run design for reduced amperage

15 = Fixed CW Rotation, viewing opposite shaft (or lead end) of motor

ES = Energy Saver Design

Note: Please review the AutomationDirect Terms & Conditions for warranty and service on this product. Warranty service can be arranged through numerous Marathon Electric service centers. See list of service centers on our Website at www.automationdirect.com.

Performance Data 1-phase 56J Frame Motors (230V/60Hz except as indicated) Jet Pump (Centrifugal) Totally Enclosed Motors

Part Number	HP	F.L. RPM	Current @ 115V/230V (Amps)			Torque (lb-ft)			F.L. Effic. %	F.L. Power Factor	Rotor Inertia (lb-ft ²)
			No Load 230V	Full Load 115/230V	Locked Rotor	Full Load	Locked Rotor	Break-down			
C1336	1/3	3450	2.3	5.6 / 2.8	14	0.51	1.33	1.51	N/A**	N/A**	0.012
C465	1/2	3450	2.8	7.4 / 3.7	20.5	0.76	1.18	2.29	N/A**	N/A**	0.017
C352	1	3450	3.6	13.0 / 6.5	40.5	1.52	3.07	4.14	N/A**	N/A**	0.036
C878	2	3450	1.27	17.8 / 8.9	52.8	3.04	4.60	6.12	N/A**	N/A**	0.055

* Maximum Constant HP RPM is for direct-coupled loads.

** Data not available from manufacturer

Jet Pump (Centrifugal), 3-Phase Totally Enclosed Motors

C-Face Footed (Removable Base) 56J

Features

- Service Factor is 1.15
- Double-sealed ball bearings, mechanically locked on shaft end
- Continuous Duty
- Nameplate 60/50 Hz, 190/380 volts at next lower HP, as noted
- 56J = 416 stainless steel threaded shaft with slinger
- UL Recognized, CSA Certified and CE Mark
- Drip cover kit included
- IP43 Rating

Applications

- Replaces 90 volt and 180 volt PMDC motors (when used with AC variable frequency drives)
- Typical uses include: jet pumps and jet pump motor replacements, well pumps, and liquid pumping applications.



Motor Shipping Schedule *

Same or one day *

Up to 7 days

Up to 10 days

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Motor Specifications – Jet Pump (Centrifugal) 3-Phase Totally Enclosed Motors

Part Number*	Price	HP	Base RPM	Volts	Encl.	NEMA Design	NEMA Frame	Model No.	F.L. Amps	Weight (lb)*	Footnotes	Drawing Links
J061	\$348.00	1/2	3600	208-230 / 460 - 190 / 380	TEFC	B	56J	56T34F5342 D	2.0 - 2.2 / 1.1 - 1.85 / 0.92	23	68	PDF
J063A	\$494.00	1		230 / 460 - 190 / 380				56T34F99029 A	3 / 0 / 1.5 - 2.6 / 1.3	25	68 Nameplate footnote: Suitable for 208V at 60Hz	PDF
J064A	\$611.00	1-1/2		208-230 / 460 - 190 / 380				56T34F99018 A	4.2 - 4.0 / 2.0 - 3.4 / 1.7	26	68	PDF
J065A	\$704.00	2		230 / 460 - 190 / 380				56T34F15592 A	5.0 / 2.5 - 4.6 / 2.3	30	68 Nameplate footnote: Suitable for 208V at 60Hz	PDF
J066A	\$728.00	3						056T34F15601	7.6 / 3.8 - 6.4 / 3.2	48		PDF

* Refer to the Motor Shipping Schedule table for shipping information.

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Footnotes: 68 = Rated 60/50 hertz, 190/380 or 380 volt at next lower horsepower

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Performance Data – Jet Pump (Centrifugal) 3-Phase Totally Enclosed Motors

Part Number	HP	F.L. RPM	Min. RPM	F.L. AMPS @460V	N.L. AMPS @460V	F.L. Torque (lb-ft)	B.D. Torque (lb-ft)	Max. CHP RPM*	Max. Safe RPM	F.L. Effic.	F.L. Power Factor	Rotor Inertia (lb-ft²)
J061	1/2	3450	345	1.1	0.7	0.76	3.8	2700	4000	66	69.7	0.02
J063A	1			1.5	0.75	1.5	4.8			78.5	79.1	0.023
J064A	1-1/2			2.0	0.9	2.2	9.6			84	83.5	0.045
J065A	2			2.5	1	3.0	12.2			85.5	86	0.065
J066A	3			3.8	1.7	4.5	22.7			87.5	84	0.045

* Maximum Constant HP RPM is for direct-coupled loads.