

PRODUCT INFORMATION PACKET



Model No: LM16745

Catalog No: LM16745

General Purpose Motor, 5 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 380-415 V, 3600 & 3000 RPM,
184TC Frame, TEFC



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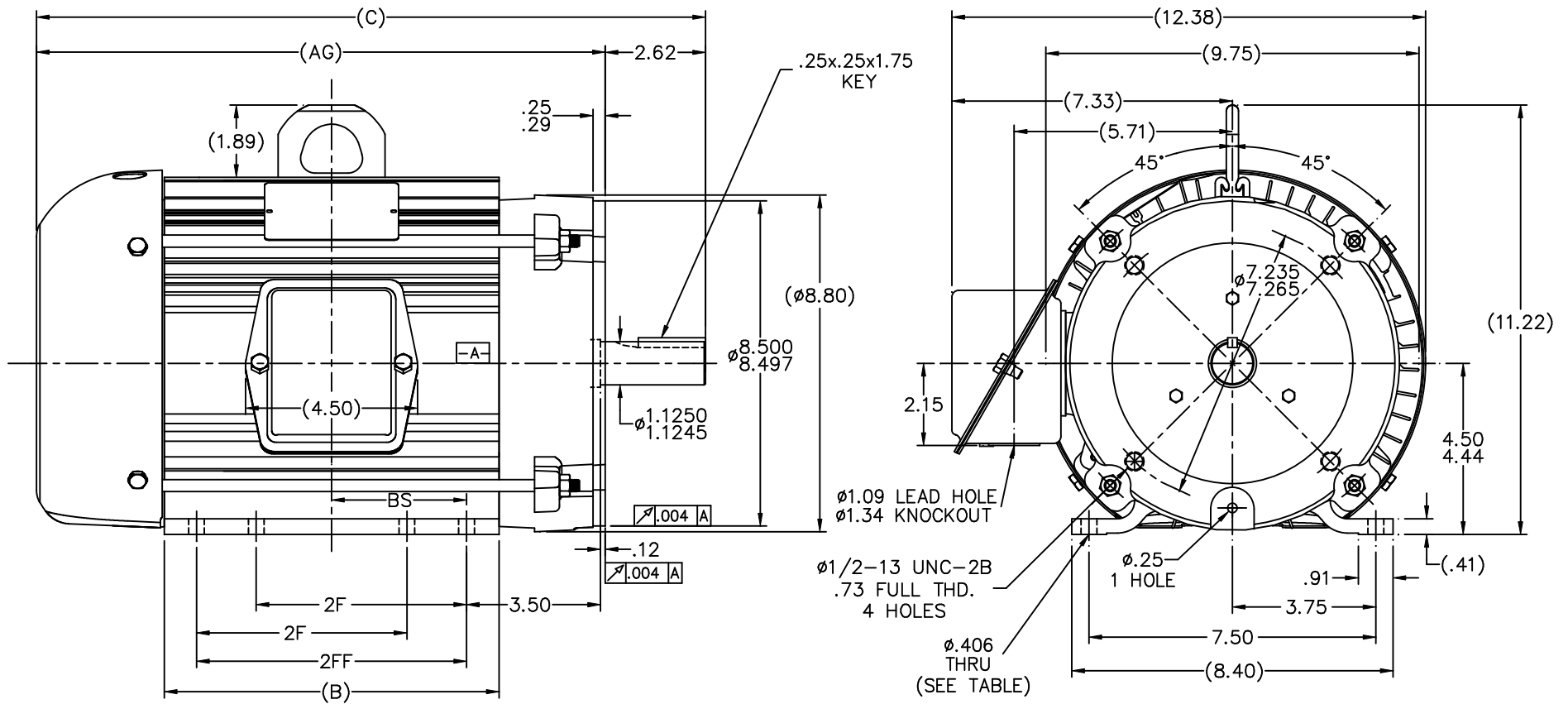


Nameplate Specifications

Phase	3	Output HP	5 & 5 Hp
Output KW	3.7 & 3.7 kW	Voltage	230/460 & 380-415 V
Speed	3505 & 2890 rpm	Service Factor	1.25 & 1.0
Frame	184TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 87.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	11.8/5.9 & 7-6.8 A	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	J
Drive End Bearing Size	207	Opp Drive End Bearing Size	205
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications


Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	2.32 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	16.83 in
Frame Length	8.20 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS601010LN-820	Connection Drawing	A-EE7308-LN



NOTES:

1. CONDUIT BOX TO BE ROTATED IN 90° STEPS.
2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FR.	C	BS	B	2F	AG	2FF	FOOT HOLE
620	182T	14.83	2.25	6.20	---	12.21	4.50	4
720	184T	15.83	2.75	7.20	---	13.21	5.50	4
720	182/4T	15.83	2.75	7.20	4.50	13.21	5.50	8
820	182/4T	16.83	3.25	8.20	5.50	14.21	6.50	8
875	184T	17.49	3.53	8.75	5.50	14.87	7.06	8

10	CHANGED DASH 720 182/4T TO 184T AND DIMENSION 2FF FROM 4.50 TO 5.50 ECN 10328	JJB 05/25/2007	ML	TOLERANCES UNLESS SPECIFIED		DRAWN BJW 02/01/2000
9	-620, 720; 2F NOW 2FF DIM. (4 MTG HOLES) CN 33910	DRS 10-25-2005	ML .X	DEC. INCHES		CHK ML 02/02/2000
8	FIXED 2FF DIM. FOR -820 WAS 5.50 CN 32479	ERH 02-02-2004	ML .XX	±.03		APPD GK 02/02/2000
7	ADDED OLD DASHES TO TABLE CN 32479	ERH 12-10-2003	ML .XXX	±.005		SCALE 3=8
6	REVISED PER CN 32479	ERH 12-01-2003	ML .XXXX	±.0005		REF
NO.	REVISION	BY & DATE	CHK ANG	±730"	TITLE OUTLINE 180T FR. - TEFC - C'FACE	FIMF MU48444
					FINISH	PREV
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK AND ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE, THIS PRINT			RFP	CAD FILE ss601010In	SIZE B	DRAWING NO. SS601010LN
			DIST LB			PAGE OF 10

THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

				TOLERANCES UNLESS SPECIFIED			DRAWN BLR 06/11/1999			
				DEC.	INCHES		CHK ML 06/18/1999			
				.X	±.1		APPD GK 06/18/1999			
3	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XX	±.02	TITLE CONNECTION DIAGRAM 3ø – DUAL VOLTAGE MOTOR	SCALE 1=1			
2	RE-ISSUE, ADDED '-' TO PART NUMBER	BLR 08/09/1999	GK	.XXX	±.005		REF			
1	NEW DRAWING	BLR 06/18/1999	GK	.XXXX	±.0005	MAT'L.	FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV			
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT – DO NOT SCALE THIS PRINT			RFP		CAD FILE EE7308LN		SIZE	DRAWING NO.	PAGE OF	REV.
			DIST WP				A	EE7308-LN		3



CERTIFICATION DATA SHEET

**2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810**

CONN. DIAGRAM: A-EE7308-LN

OUTLINE: B-SS601010LN-820

CATALOG #: LM16745

WINDING #: 1842116 FL 6

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5&5	3.70&3.70	3600	3505&2890	184TC	TEFC	J	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&380-415	11.8/5.9&7-6.8	ACROSS THE LINE	CONTINUOUS	F3	1.25/1.0	40

FULL LOAD EFF:	89.5&87.5	3/4 LOAD EFF:	89	1/2 LOAD EFF:	88.4	GTD. EFF		ELEC. TYPE
FULL LOAD PF:	89&90	3/4 LOAD PF:	85.5	1/2 LOAD PF:	77.5	87.5		SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
7.5 LB-FT	81 / 40.5	11.5 LB-FT 153 %	22.5 LB-FT 300 %	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.28 LB-FT^2	5 LB-FT^2	15 SEC.	2	80 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	GRAY (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ALUMINUM
207	205						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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INVERTER TORQUE:	NONE
INV. HP SPEED RANGE:	NONE
ENCODER:	NONE
	NONE NONE
	NONE NONE PPR
BRAKE:	NONE NONE
	NONE P/N NONE
	NONE NONE
	FT-LB V NONE Hz

Data Sheet

Date: 1/18/2018

LM16745



Data @ 460 V

Motor Load Data

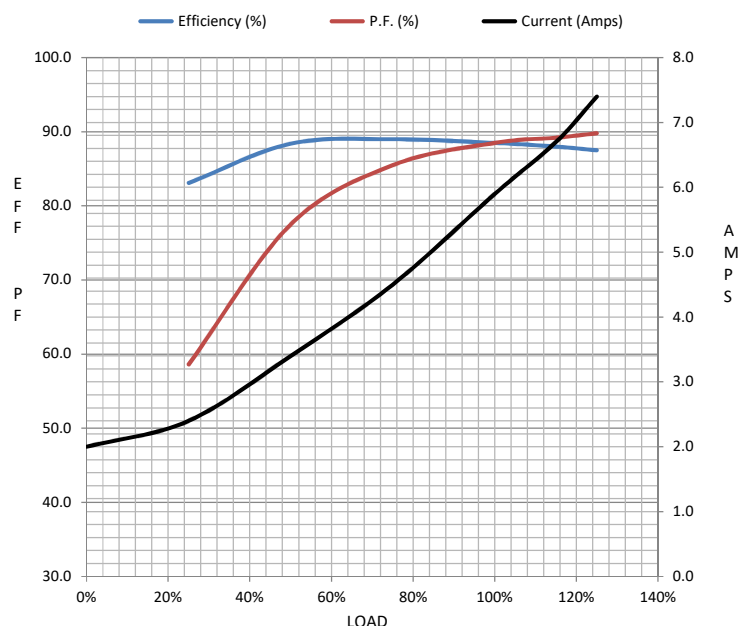
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.00	2.40	3.4	4.5	5.9	6.7	7.4	40.5	
Torque (ft-lb)	0.00	1.80	3.7	5.5	7.5	8.6	9.4	11.5	
RPM	3600	3580	3560	3535	3505	3,490	3480	0	
Efficiency (%)		83.1	88.4	89.0	88.5	88.0	87.5		
P.F. (%)	11.5	58.6	77.5	85.5	88.5	89.2	89.8	41.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3000	3505	3600
Current (Amps)	40.5	37.0	25.5	5.9	2.00
Torque (ft-lb)	11.5	10.5	22.5	7.5	0.00

Information Block

HP	5.0			
Sync. RPM	3600			
Frame	184			
Enclosure	TEFC			
Construction	TFL			
Voltage	230/460#380-415	V		
Frequency	60	Hz		
Design	B			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	50	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	0.28	Lb-Ft²		
Ref Wdg	1842116 FL			
Sound Pressure @ 1M	72	dBA		
VFD Rating	NONE			
Outline Dwg	B-SS601010LN-820			
Conn. Diag	A-EE7308-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.3920	1.1300	4.8110	1.8460	124.9600



Speed - Torque Curve

