

BALDOR® • RELIANCE 

Product Information Packet

CEM2543T

50HP,1775RPM,3PH,60HZ,326TC,4256M,OPSB,F

Part Detail							
Revision:	R	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	42WGW387	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	42D102	Layout:	42LYD102	Poles:	04	Created Date:	08-03-2010
Base:	RG	Eff. Date:	09-06-2017	Leads:	9#8		

Specs			
Catalog Number:	CEM2543T	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	326TC	KVA Code:	G
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	50.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	CSA	Motor Type:	4256M
	CSA EEV	Mounting Arrangement:	F1
	UR	Power Factor:	87
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	C-Face
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	57.000 A @ 460.0 V	Shaft Extension Location:	Pulley End
	121.000 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding

	114.000 A @ 230.0 V	Shaft Rotation:	Reversible
Design Code:	A	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	NONE (OLD)
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3554LUA											
CAT.NO.	CEM2543T			P/N				ENCL	OPSB		
SPEC.	42D102W387G1		CC	010A		FRAME	326TC		SER.NO.		
HP	50		CLASS	F		HZ	60				
RPM	1775		PH	3		DES	A				
VOLTS	230/460			CODE	G		ODE BRG	6311		DE BRG	6312
AMPS	114/57			USABLE AT 208V	121						
RATING	40C AMB-CONT			NEMA-NOM-EFF	94.5		GREASE	POLYREX EM			
PF	87		SER.F.	1.15		VPWM INVERTER READY					
USABLE AT	50Hz 50Hp 190/380V 136/68A				SF 1.0						
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA200900	SA 42D102W387G1	1.000 EA
RA188210	RA 42D102W387G1	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	1.000 EA
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
42EP3200A01	FR ENDPLATE, MACH	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW5100A13	W4627-047 WVY WSHR	1.000 EA
42EP1300A20	PU ENDPLATE, MACH	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.030 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
HA3151A03	THRUBOLT STUD 1/2-13 X 20.5	4.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 53755 - Typical performance - not guaranteed values

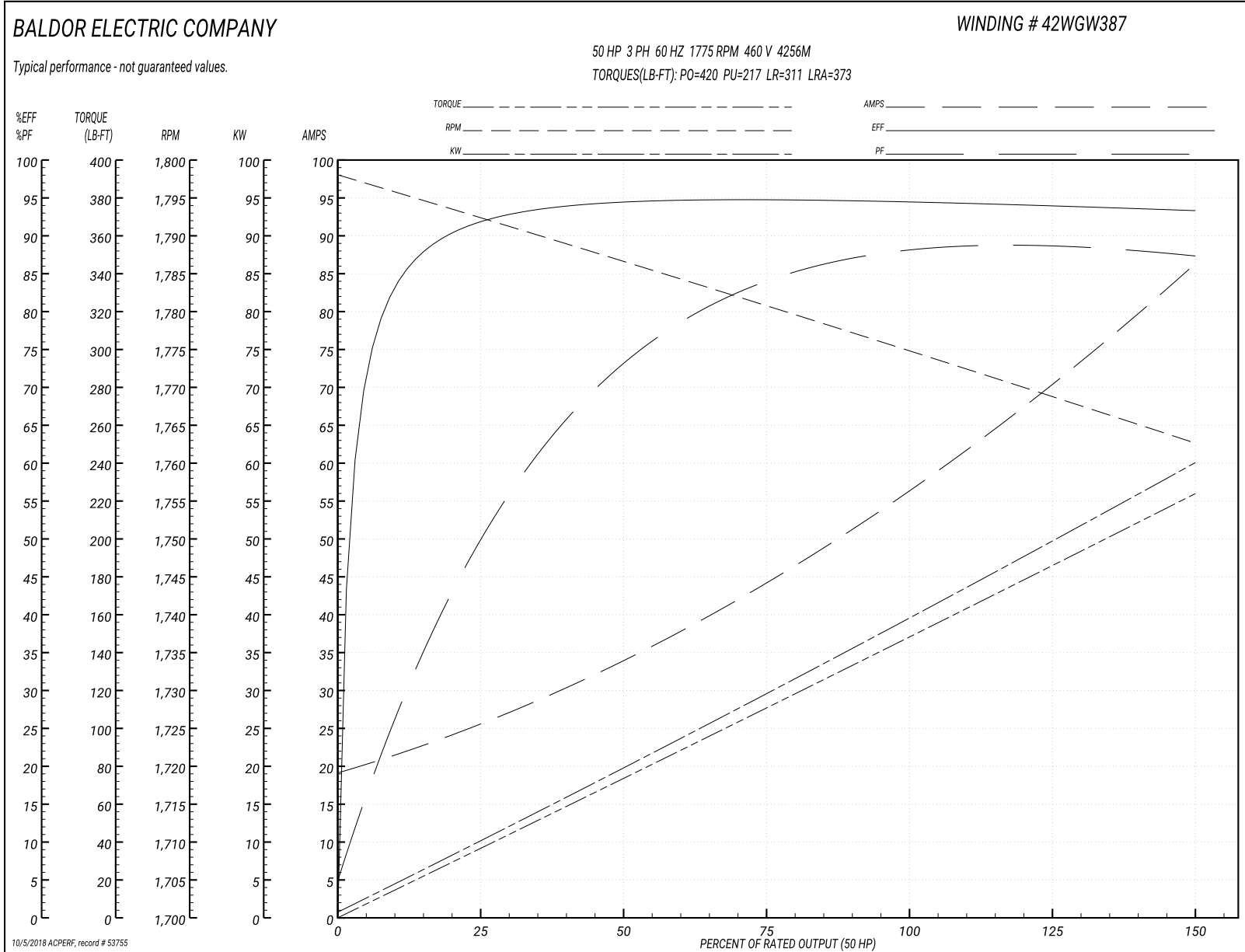
Winding: 42WGW387-R001	Type: 4256M	Enclosure: OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50			Full Load Torque	149 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	114/57			Breakdown Torque	420 LB-FT
R.P.M.	1775			Pull-up Torque	217 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	311 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	373 A
Service Factor (S.F.)	1.15			No-load Current	20.2 A
NEMA Nom. Eff.	94.5	Power Factor	87	Line-line Res. @ 25°C	0.12266 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	39°C
S.F. Amps				Temp. Rise @ S.F. Load	47°C

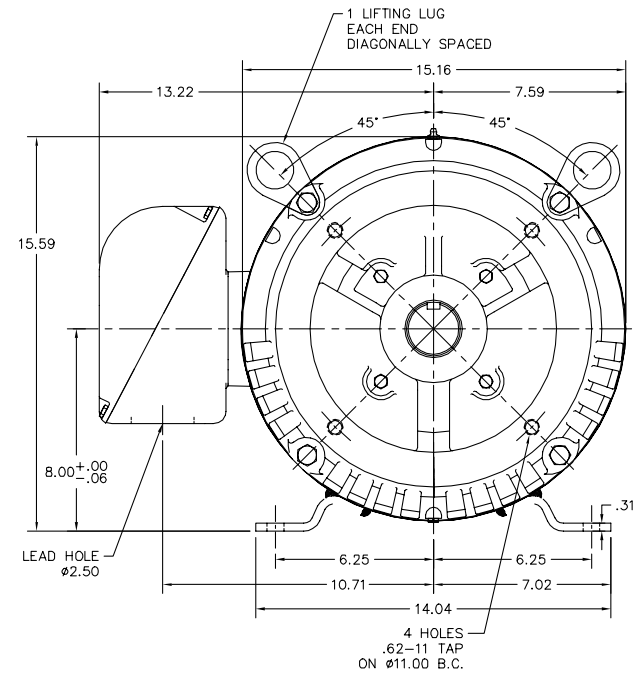
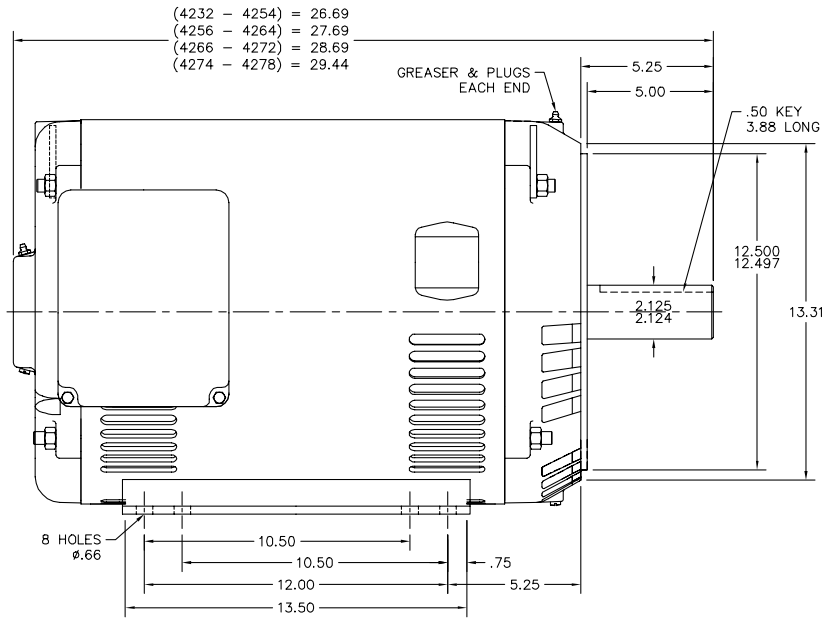
Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	75	83	87	88	88	88
Efficiency	92	94.5	94.9	94.7	94.2	93.4	94.4
Speed	1791	1786.1	1781.1	1775.2	1769.2	1762.1	1772
Line amperes	24.4	33.4	44.7	57.4	71	85.6	65.6

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values



42LYD102



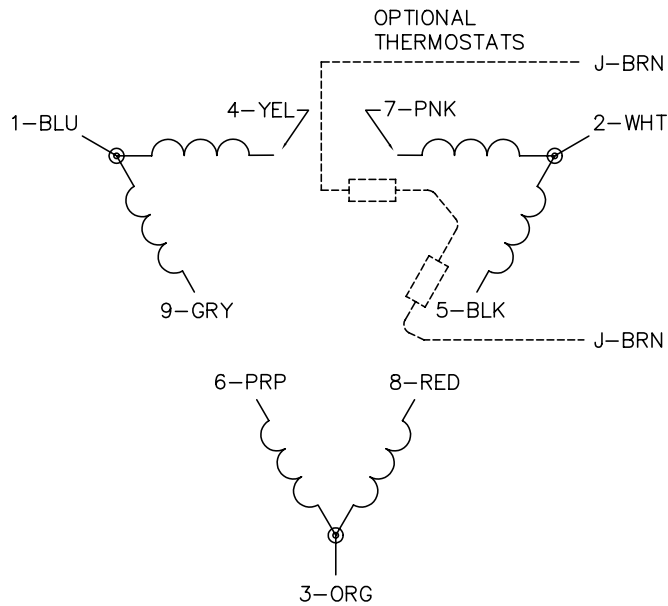
42LYD102

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

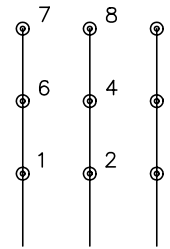
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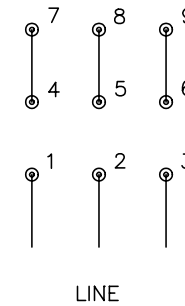
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C BY: JLP

REVISED: 01/21/99 2:28

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MDL: -

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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180

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