

BALDOR® • RELIANCE 

Product Information Packet

EM3545-57

1HP,2850RPM,3PH,50HZ,56,3516M,TEFC,F1,N

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGL462	CD Diagram:	CD0022	Mfg Plant:	
Mech. Spec:	35E2941	Layout:	35LYE2941	Poles:	02	Created Date:	12-23-2015
Base:	RG	Eff. Date:	08-22-2022	Leads:	6#18		

Specs			
Catalog Number:	EM3545-57	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	B
Frame:	56	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	J
Motor Letter Type:	Three Phase	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.000 HP @ 50 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	3000 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 18 AWG
Voltage @ Frequency:	230.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
	400.0 V @ 50 HZ	Motor Type:	3516M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	87
Agency Approvals:	UR	Product Family:	General Purpose
	WEEE	Pulley End Bearing Type:	Ball
	CSA	Pulley Face Code:	Standard
	CE	Pulley Shaft Indicator:	Standard
Auxillary Box:	No Auxillary Box	Rodent Screen:	None
Auxillary Box Lead Termination:	None	RoHS Status:	ROHS COMPLIANT
Base Indicator:	Rigid	Shaft Ground Indicator:	No Shaft Grounding

Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Blower:	None	Shaft Slinger Indicator:	No Slinger
Current @ Voltage:	1.600 A @ 400.0 V	Speed Code:	Single Speed
	2.800 A @ 230.0 V	Motor Standards:	NEMA
Design Code:	B	Starting Method:	Direct on line
Drip Cover:	No Drip Cover	Thermal Device - Bearing:	None
Duty Rating:	CONT	Thermal Device - Winding:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Vibration Sensor Indicator:	No Vibration Sensor
Feedback Device:	NO FEEDBACK	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None

Nameplate NP2716L

CAT NO	EM3545-57										
SPEC.	35E2941L462G1										
HP	1/.75KW							PH	3		
VOLTS	230/400										
AMP	2.8/1.6										
RPM	2850 1/MIN										
FRAME	56				HZ	50		I.P.	44		
SER.F.	1.25			CODE	J		DES	B		CL	B
NOM.EFF.	82.5							% (100%)			
PF	87						USABLE AT 208V				
RATING	40C AMB-CONT						CC				
DE BRG	6205				ODE	6203					
ENCL	TEFC			SN							
BLANK	SFA 3.3/1.9										
	IE3 81.2 (75%) 77.8 (50%)										
	16KG IC411										

Parts List		
Part Number	Description	Quantity
SA312708	SA 35E2941L462G1	1.000 EA
RA300147	RA 35E2941L462G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 EA
35GS1030	35 GS FOR CB LID - LEXIDE	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 LB
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.017 GA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LC0034	CONNECTION LABEL	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
LB1119N	WARNING LABEL	1.000 EA
NP2716L	ALUM SUPER-E NEMA IE3 UL CSA CC CE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
LB1617	UKCA COMPLIANCE STICKER	1.000 EA

AC Induction Motor Performance Data

Record # 54628

Typical performance - not guaranteed values

Winding: 35WGL462-R001			Type: 3516M	Enclosure: TEFC	
Nameplate Data			400 V, 50 Hz: High Voltage Connection		
Rated Output (HP)		1	Full Load Torque		1.9 LB-FT
Volts		230/400	Start Configuration		direct on line
Full Load Amps		2.8/1.6	Breakdown Torque		6.33 LB-FT
R.P.M.		2850	Pull-up Torque		5.05 LB-FT
Hz	50 Phase	3	Locked-rotor Torque		5.67 LB-FT
NEMA Design Code		B KVA Code	Starting Current		11.3 A
Service Factor (S.F.)		1.25	No-load Current		0.718 A
NEMA Nom. Eff.		82.5 Power Factor	Line-line Res. @ 25°C		15.2 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		39°C
S.F. Amps		3.3/1.9	Temp. Rise @ S.F. Load		52°C
			Locked-rotor Power Factor		63.4
			Rotor inertia		0.0443 LB-FT2

Load Characteristics 400 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	72	82	87	91	92	91
Efficiency	74.5	81.7	83	83	81.9	79.9	81.9
Speed	2963	2937	2906	2873	2836	2795	2836
Line amperes	0.825	1.01	1.28	1.55	1.89	2.27	1.89

Performance Graph at 400V, 50Hz, 1.0HP Typical performance - Not guaranteed values





