

ABB BALDOR RELIANCE III

Customer information packet

IR3510M

1HP, 1750RPM, 1PH, 60HZ, 56, 3528L, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.500 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	65.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.5 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs

Part Detail

Revision	-
Type	AC
Mech. spec.	35K634
Base	
Status	PRD/A
Elec. spec.	35WGK934
Layout	35LYK634
Eff. date	12-02-2024
CD Diagram	CD0045
Poles	04
Leads	8#18
Proprietary	False
Created date	11-14-2024

Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	8 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3528L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.23 IN
Power Factor	72
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Manual Thermal Overload
Winding Thermal 1 Location	KO
Winding Thermal 2	None

Nameplate

NP1280L									
CAT.NO.	IR3510M								
SPEC.	35K634K934								
HP	1								
VOLTS	230								
AMP	6.5								
RPM	1750								
FRAME	56		HZ	60		PH		1	
SER.F.	1.15		CODE	L		DES	L	CL	F
NEMA-NOM-EFF	65		PF	72					
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	TEFC		SN						

Parts List

Part number	Description	Quantity
SA432588	SA 35K634K934	1.000 ea
RA424852	RA 35K634K934	1.000 ea
TPMRJ26AB	THERMAL 1PH .75 MAN 120C X	1.000 ea
EC1145C06SP	ELEC CAP 230V 2.0 X 4.3	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007A59	35 CB .88 DIA @ 6:00, .75 MTO W/BOOT @ 3	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
51XT0632A06	6-32X3/8 TY23 HXWS SLDSR	2.000 ea
HA6001A01	THERMAL RETAINER (PLATED)	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
RM1014A01SP	BUTYL RUB.THRM COV. (MENA)	1.000 ea
35EP3122K02	K00 W/INST REV SW	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
35CB3801	CAPACITOR COVER, CAST	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	2.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	6.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1087	LABEL,MANUAL RESET (ROLL LABEL)	1.000 ea

WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
SP5179A01	STATIONARY SWITCH ASSY. INSTANT REV.	1.000 ea
MG1025C02	WILKOFASST SG, 787.105, TAN	0.017 ga
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0045	CONNECTION LABEL X	1.000 ea
NP1280L	ALUM FARM DUTY UL CC THERMAL	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 105812

Typical performance - not guaranteed values

Winding: 35WGK934-R001			Type: 3528L		Enclosure: TEFC	
Nameplate Data			230 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		1	Full Load Torque		2.983 LB-FT	
Volts		230	Start Configuration		direct on line	
Full Load Amps		6.7	Breakdown Torque		8.7 LB-FT	
R.P.M.		1750	Pull-up Torque		6.33 LB-FT	
Hz	60	Phase	1	Locked-rotor Torque		8.47 LB-FT
NEMA Design Code		L	KVA Code		L	
Service Factor (S.F.)		1.15	Starting Current		42.3 A	
NEMA Nom. Eff.		65	Power Factor		73	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps			Line-line Res. @ 25°C		2.5909 Ω A Ph 7.3069 Ω B Ph	
			Temp. Rise @ S.F. Load		79°C	
					92°C	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	50	62	72	78	83	76
Efficiency	46	61.2	67.4	69.4	69	67.3	69.2
Speed	1786.4	1776.7	1766.1	1753.3	1738.8	1719.7	1745
Line amperes	4.93	5.23	5.75	6.49	7.47	8.7	7.08

ABB Motors and Mechanical Inc.

WINDING # 35WGK934

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 1750 RPM 230 V 3528L

TORQUES (LB-FT) : PO=8.7 PU=6.33 LR=8.47 LRA=42.3





