ABB BALDOR RELIANCE

Customer information packet

VEBM3116T

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3520M, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.200 A @ 230.0 V
	3.200 A @ 208.0 V
	1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	F
Type	AC
Mech. spec.	35E054
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYE054
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.32 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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	None
Winding Thermal 2	None

Nameplate

	NP1259L									
CAT.NO.	VEBM3116T									
SPEC.	35E054G004G1									
HP	1									
VOLTS	230/460									
AMP	3.2/1.6									
RPM	1770									
FRAME	143TC	**HZ**	60				**PH**	3		
SER.F.	1.15	**CODE**	N	**DES**	B	**CL**	F			
NEMA-NOM-EFF	85.5	**PF**	69							
RATING	40C AMB-CONT									
CC	010A									
DE	6205	**ODE**	6203							
ENCL	OPEN	**SN**								
	SFA 3.4/1.7									

Parts List

Part number	Description	Quantity
SA402053	SA 35E054G004G1	1.000 ea
RA393316	RA 35E054G004G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	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
35EP3900A02	SPL FACE MTD FR EP-OPEN-W/STEARNS BRAKE	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3402B00	MASTER DE,205 BRG,OPEN,W/GREASER	1.000 ea
35AD2000	AIR BAFFLE - GALVANNEAL	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HW2501D10	KEY, 3/16 SQ X 1.000	1.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
84XN3816J28	HEX SOC HD, 3/8-16 X 1.75 LONG	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
76BK2100BQF	1-056-021-00-BQF BRAKE TDR# 79345	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1404	BRAKE CONNECTION LABEL	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea

PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 91625
Typical performance - not guaranteed values

Winding: 35WGG004-R001	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	2.982 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			3.2/1.6	**Breakdown Torque**	14.6 LB-FT
R.P.M.			1770	**Pull-up Torque**	7.57 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	9.17 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	14.6 A
Service Factor (S.F.)			1.15	**No-load Current**	1.2 A
NEMA Nom. Eff.	85.5	**Power Factor**	69	**Line-line Res. @ 25ºC**	16.049 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
S.F. Amps			3.4/1.7	**Temp. Rise @ S.F. Load**	41°C
				Locked-rotor Power Factor	61.549
				Rotor inertia	0.144 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	1.22	1.31	1.46	1.64	1.86	2.11	1.77

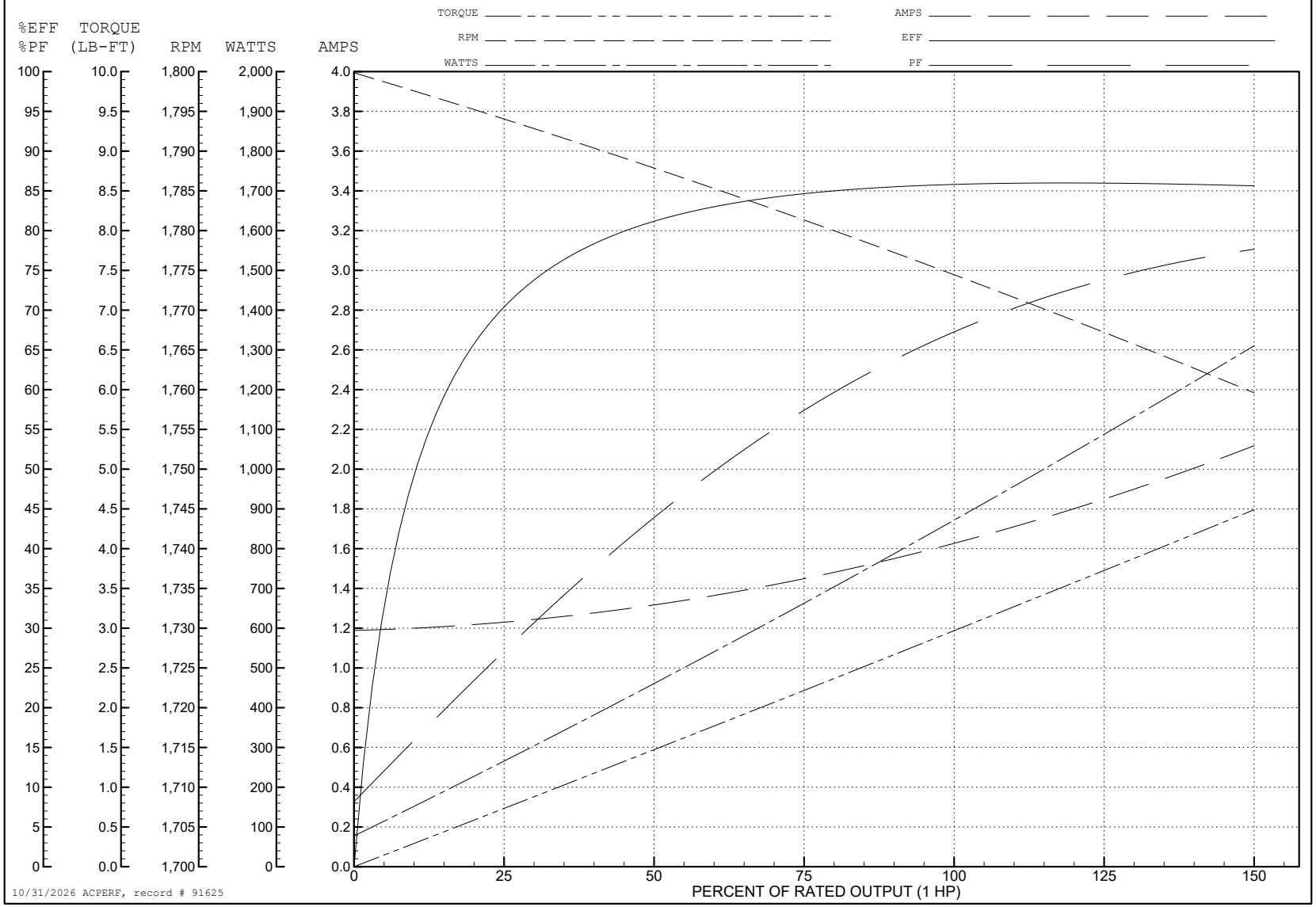
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

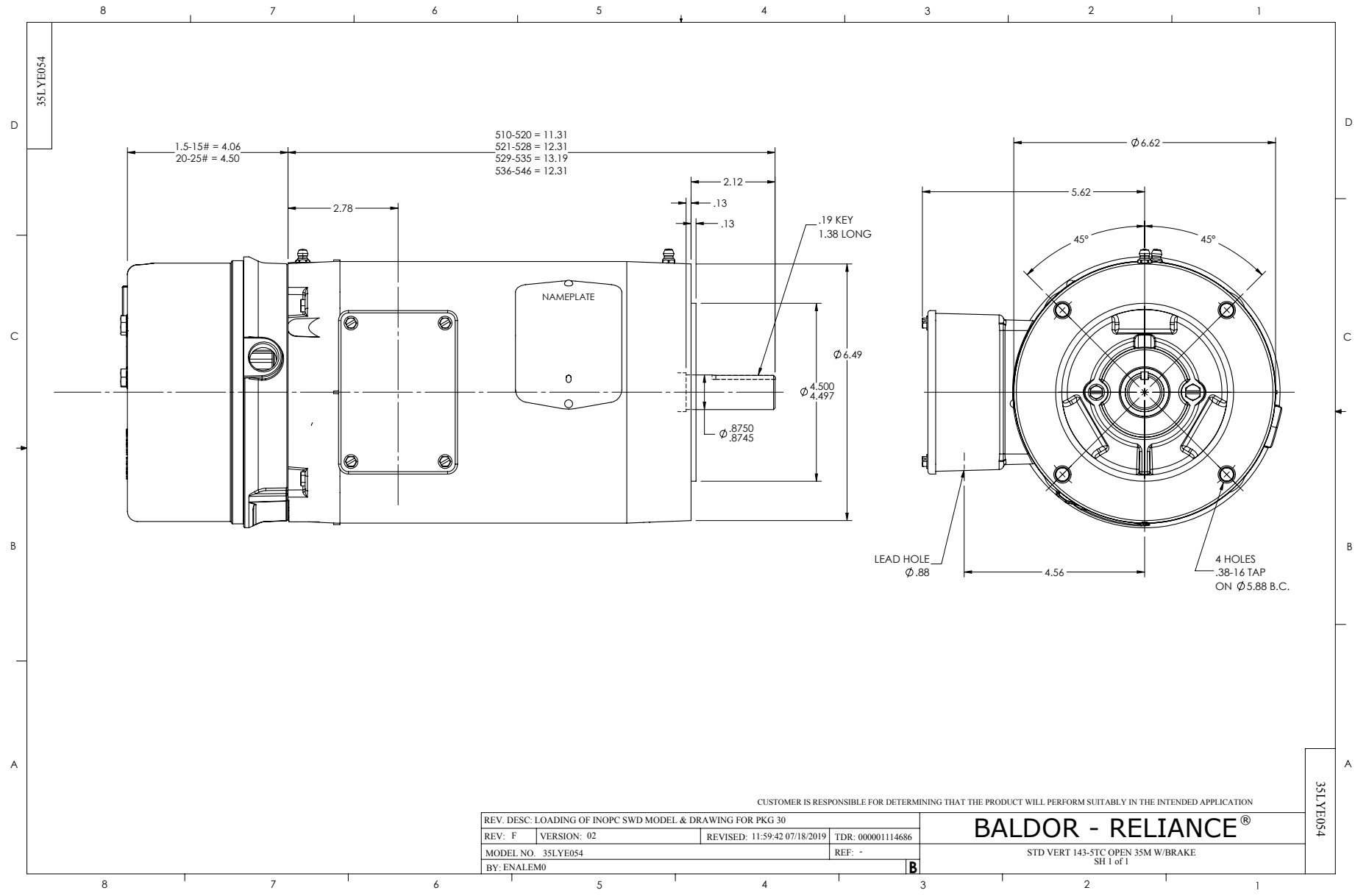
1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

Typical performance - not guaranteed values.

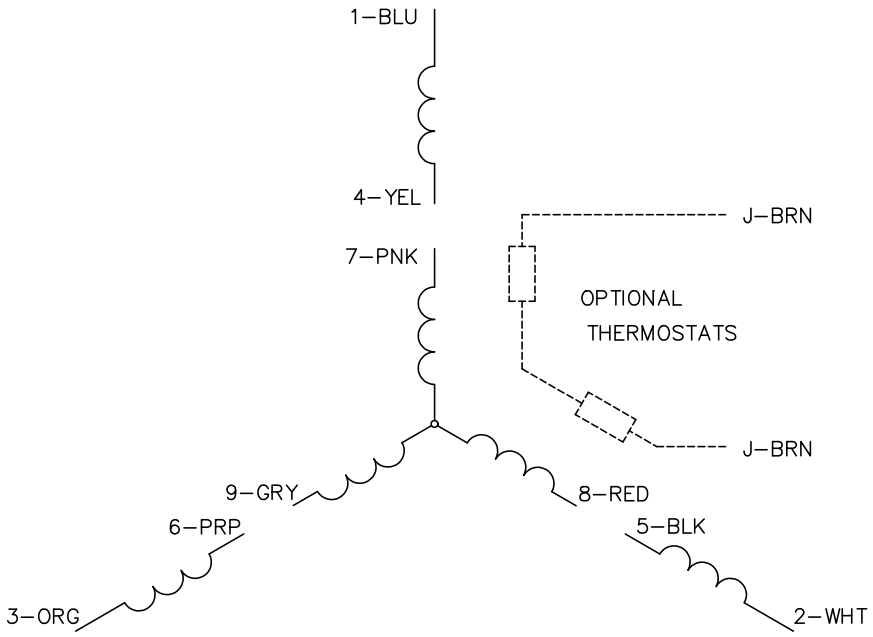
TORQUES(LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6

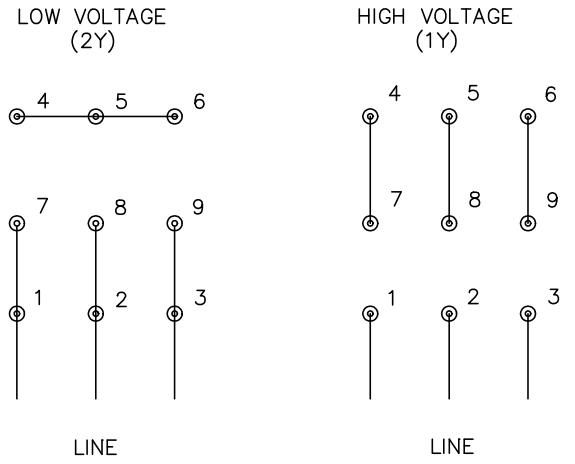


10/31/2026 ACPERF, record # 91625


35LYE054
1.5-15# = 4.06
20-25# = 4.50
510-520 = 11.31
521-528 = 12.31
529-535 = 13.19
536-546 = 12.31
2.78
2.12
.13
.13
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.8750
.8745
Ø6.62
5.62
45°
45°
LEAD HOLE
Ø.88
4.56
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF INOPC SWD MODEL & DRAWING FOR PKG 30
REV: F
VERSION: 02
REVISED: 11:59:42 07/18/2019
TDR: 000001114686
MODEL NO. 35LYE054
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD VERT 143-5TC OPEN 35M W/BRAKE
SH 1 of 1
35LYE054

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS