BALDOR • RELIANCE

Customer information packet

CEM3550T

1.5HP, 3500RPM, 3PH, 60HZ, 143TC, 3520M, TEFC
MDS OF MICHIGAN INC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.000 A @ 208.0 V
	3.800 A @ 230.0 V
	1.900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part detail

Revision	X
Type	AC
Mech. spec.	35TT856
Base	
Status	PRD/A
Elec. spec.	35WGM760
Layout	35LYTT856
Eff. date	04-30-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	08-03-2010

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.9 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
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	2
Overall Length	13.29 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

NP3441LUA									
CAT.NO.	CEM3550T								
SPEC	35TT856M760G1								
HP	1.5								
VOLTS	230/460								
AMPS	3.8/1.9								
RPM	3500								
FRAME	143TC	**HZ**	60	**PH**	3				
SF	1.15	**CODE**	L	**DES**	B	**CLASS**	F		
NEMA NOM. EFF	84	**PF**	85						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	**SER**							
DE	6205	**ODE**	6203						
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	50Hz 1.5HP 190/380V 4.6/2.3A								SF1.0

Parts list

Part number	Description	Quantity
SA201300	SA 35TT856M760G1	1.000 ea
RA188601	RA 35TT856M760G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 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
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES 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
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
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN SINGLE GA	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2100bx)4/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 61761
Typical performance - not guaranteed values

Winding: 35WGM760-R069	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			1.5
Volts			230/460
Full Load Amps			3.8/1.9
R.P.M.			3500
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	L
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	84	**Power Factor**	85
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.22 LB-FT
Start Configuration	direct on line
Breakdown Torque	9.49 LB-FT
Pull-up Torque	3.61 LB-FT
Locked-rotor Torque	7.35 LB-FT
Starting Current	17.9 A
No-load Current	0.932 A
Line-line Res. @ 25ºC	12.2 Ω
Temp. Rise @ Rated Load	43°C
Temp. Rise @ S.F. Load	50°C
Locked-rotor Power Factor	60.1
Rotor inertia	0.0553 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	79	85	89	90	87
Efficiency	72.3	82.2	84.4	84.8	84.3	82.8	84.5
Speed	3575	3551	3526	3498	3466	3433	3479
Line amperes	1.03	1.25	1.55	1.91	2.31	2.79	2.15

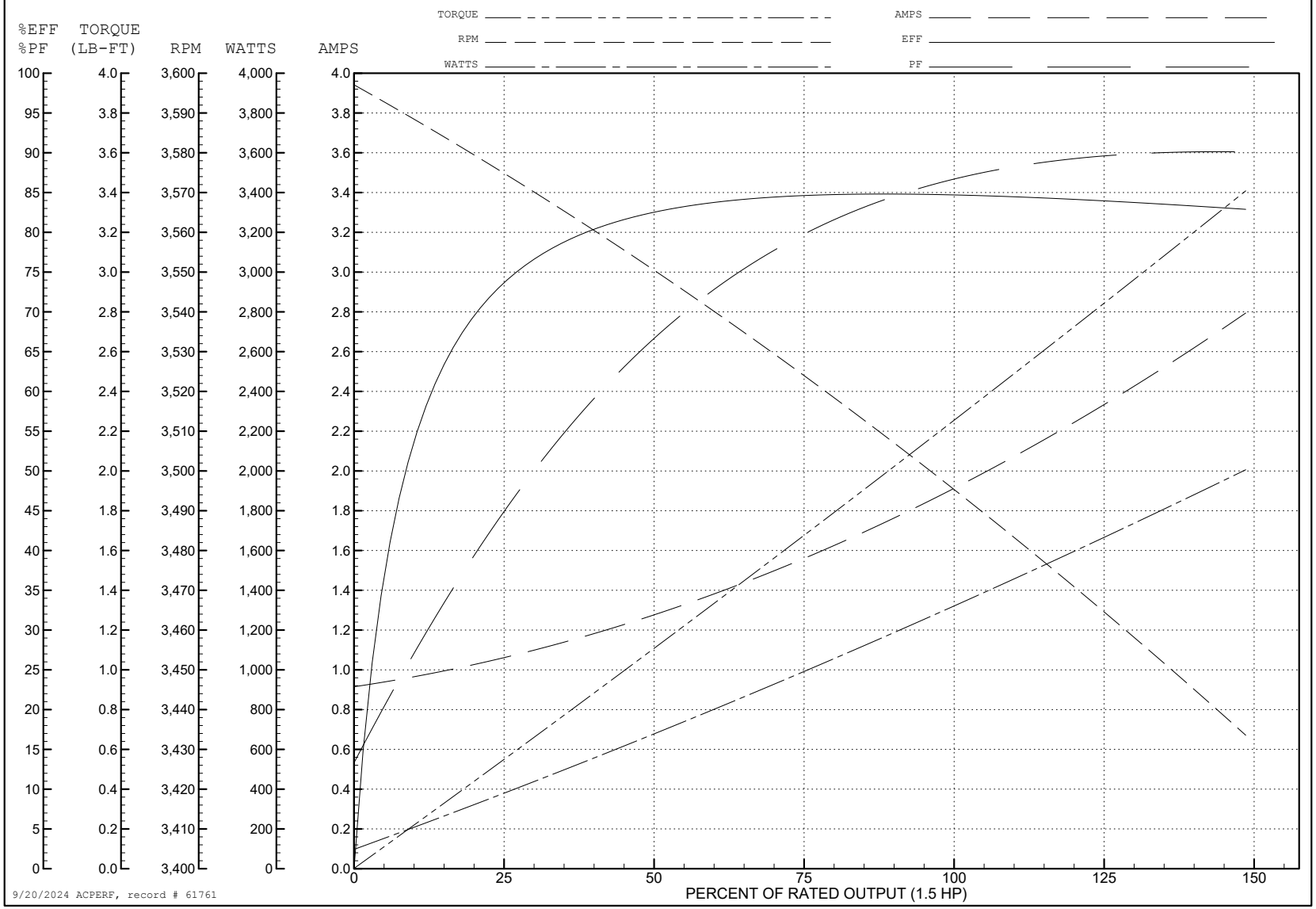
ABB Motors and Mechanical Inc.

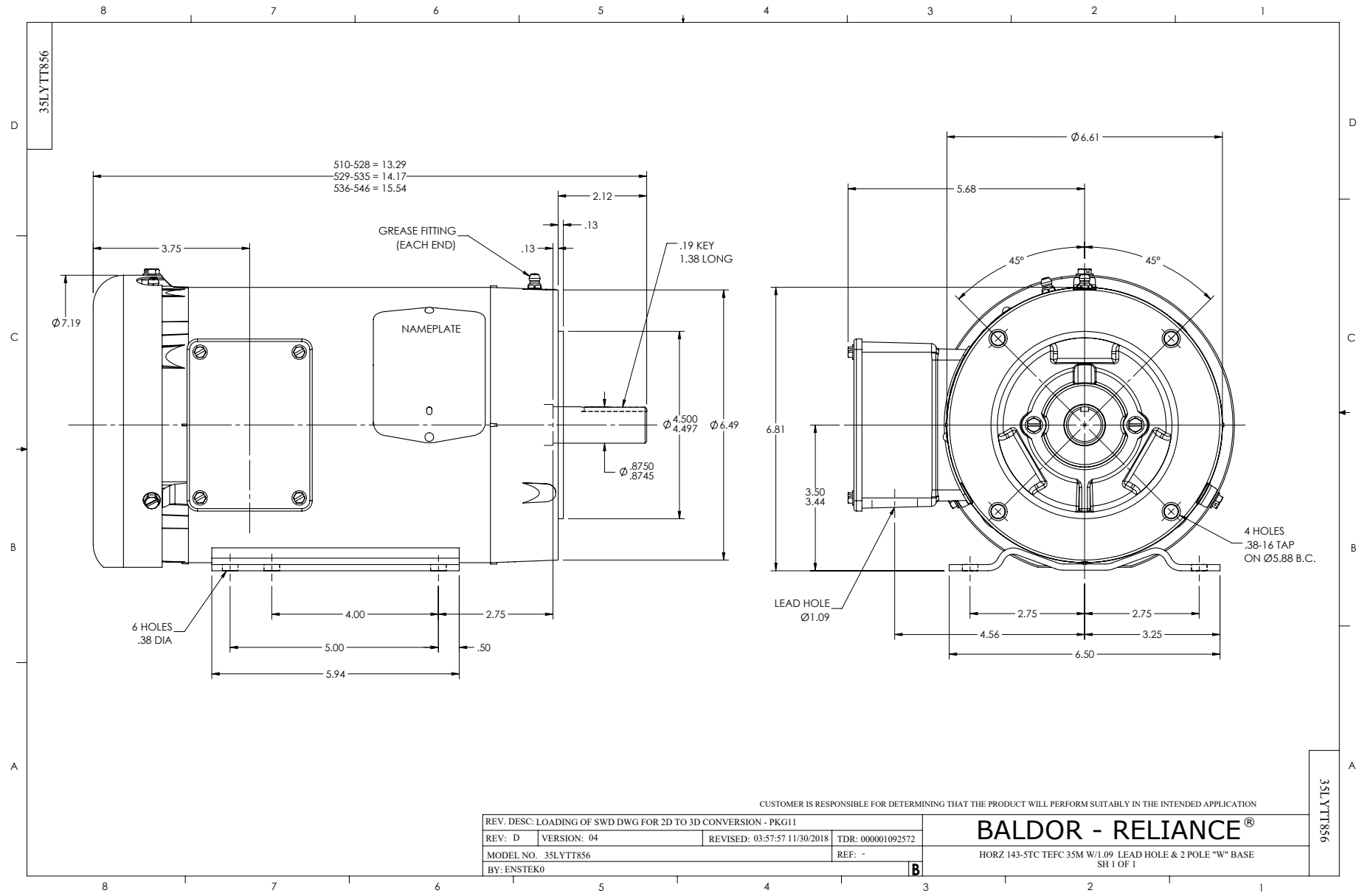
WINDING # 35WGM760

1.5 HP 3 PH 60 HZ 3500 RPM 460 V 3520M

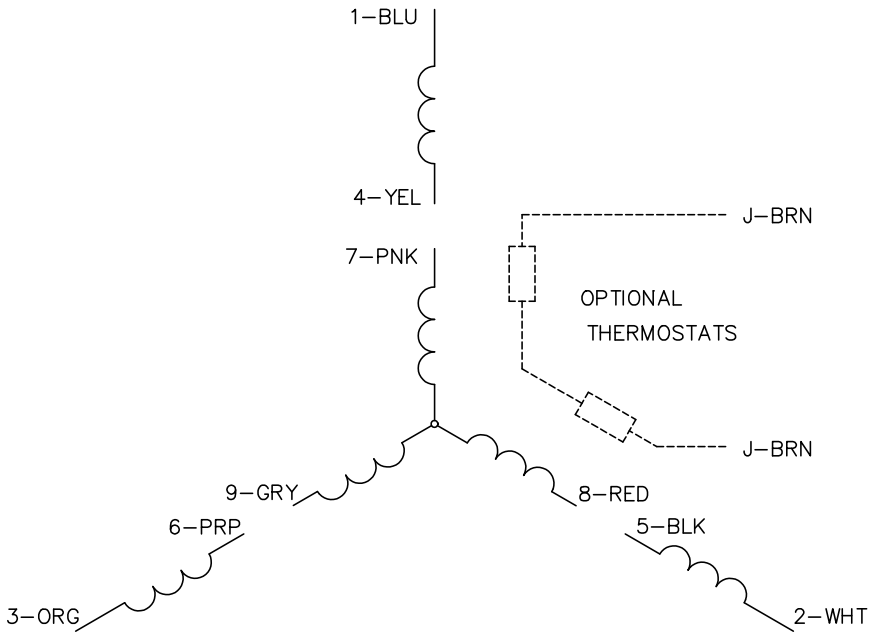
Typical performance - not guaranteed values.

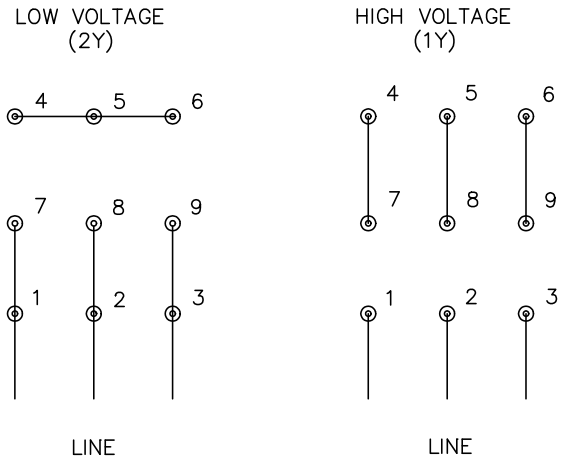
TORQUES(LB-FT): PO=9.49 PU=3.61 LR=7.35 LRA=17.9




35LYTT856
510-528 = 13.29
529-535 = 14.17
536-546 = 15.54
2.12
.13
.13
GREASE FITTING
(EACH END)
.19 KEY
1.38 LONG
3.75
Ø7.19
NAMEPLATE
Ø 4.500
4.497
Ø6.49
Ø .8750
.8745
6 HOLES
.38 DIA
4.00
2.75
5.00
.50
5.94
Ø6.61
5.68
45°
45°
6.81
3.50
3.44
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
LEAD HOLE
Ø1.09
2.75
2.75
4.56
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG11
REV: D
VERSION: 04
REVISED: 03:57:57 11/30/2018
TDR: 000001092572
MODEL NO. 35LYTT856
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
HORZ 143-5TC TEFC 35M W/1.09 LEAD HOLE & 2 POLE "W" BASE
SH 1 OF 1
35LYTT856

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