

BALDOR • RELIANCE

Customer information packet

VHECP4110T

40HP, 1775RPM, 3PH, 60HZ, 324HP, 1254M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324HP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	48.000 A @ 460.0 V 96.000 A @ 230.0 V 102.000 A @ 208.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	L
Type	AC
Mech. spec.	12S033
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYS033
Eff. date	08-01-2023
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	12-14-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.72 IN
Power Factor	82
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP1260									
CAT.NO.	VHECP4110T								
SPEC.	12S033Y276								
HP	40								
VOLTS	230/460								
AMP	96/48								
RPM	1775								
FRAME	324HP	HZ	60	PH	3				
SER.F.	1.15	CODE	H	DES	A	CL	F		
NEMA-NOM-EFF	94.1	PF	82						
RATING	40C AMB-CONT								
CC	010A								
DE	6312	ODE	6311						
ENCL	TEFC	SN							
	SFA 109/54.5								

Parts list

Part number	Description	Quantity
SA349117	SA 12S033Y276	1.000 ea
RA337715	RA 12S033Y276	1.000 ea
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB1000A16P	KOBX, MACH 2.00 NPT W/#26 DRAIN W/PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K08	1/4-20 X .50 GRADE #5, STL, ZINC PLATE	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HA3400A18	STUD .50-13 X 7.50L W/4.19L HEX WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
10XN3118K72	5/16-18 X 4.50" HEX HD, GRADE 5	4.000 ea
10XN5013K36	1/2-13 X 2.25" HEX HD GRADE 5	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
12FH1002A08P	FAN COVER, MACH W/EPOXY PRIMER	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW3203A02	1/2-13 HVY FORGED EYE-NUT	2.000 ea
12FH1500A01P	MACH DRIP COVER 310-312 MTRS	1.000 ea
10XN3816K36	3/8-16 X 2.25 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW2501G32	KEY, 3/8 SQ X 3.750	1.000 ea

MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.029 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	3.000 ea
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	3.000 ea
12EP1107A13LP5	FREP, MACH W/PRIMER & MG1025L14	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
12EP1502A02P	ENDPLATE, MACH W/EPOXY PRIMER	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP1260	SS CP SUPER-E, CURUS-E, NEMA PREM, CC	1.000 ea
10PA1052	PACKAGING GROUP, PRINT PK1151A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea

AC Induction Motor Performance Data

Record # 31673

Typical performance - not guaranteed values

Winding: 12WGY276-R001		Type: 1254M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	40	Full Load Torque	119 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	96/48	Breakdown Torque	396 LB-FT		
R.P.M.	1775	Pull-up Torque	198 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	222 LB-FT	
NEMA Design Code	A KVA Code	H	Starting Current	347 A	
Service Factor (S.F.)	1.15		No-load Current	21.03 A	
NEMA Nom. Eff.	94.1	Power Factor	82	Line-line Res. @ 25°C	0.15 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	54°C	
S.F. Amps			Temp. Rise @ S.F. Load	66°C	
			Locked-rotor Power Factor	27.1	
			Rotor inertia	7.19 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	77	82	84	85	83
Efficiency	89.8	93.4	94.1	94.4	93.9	93.1	94.1
Speed	1794	1788	1783	1777	1771	1765	1773
Line amperes	23.93	30.4	39.12	48.68	59.71	71.22	55.3

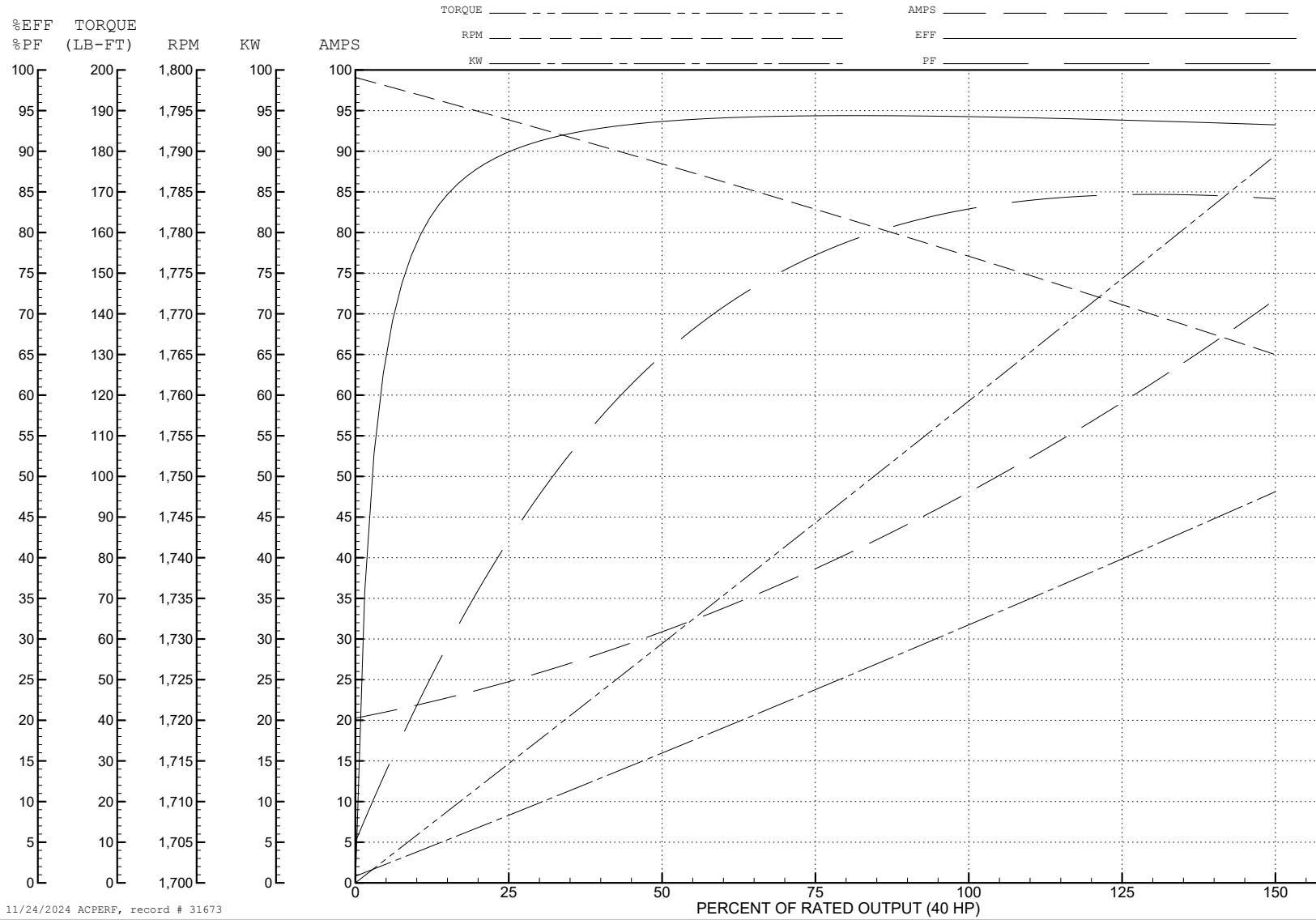
ABB Motors and Mechanical Inc.

WINDING # 12WGY276

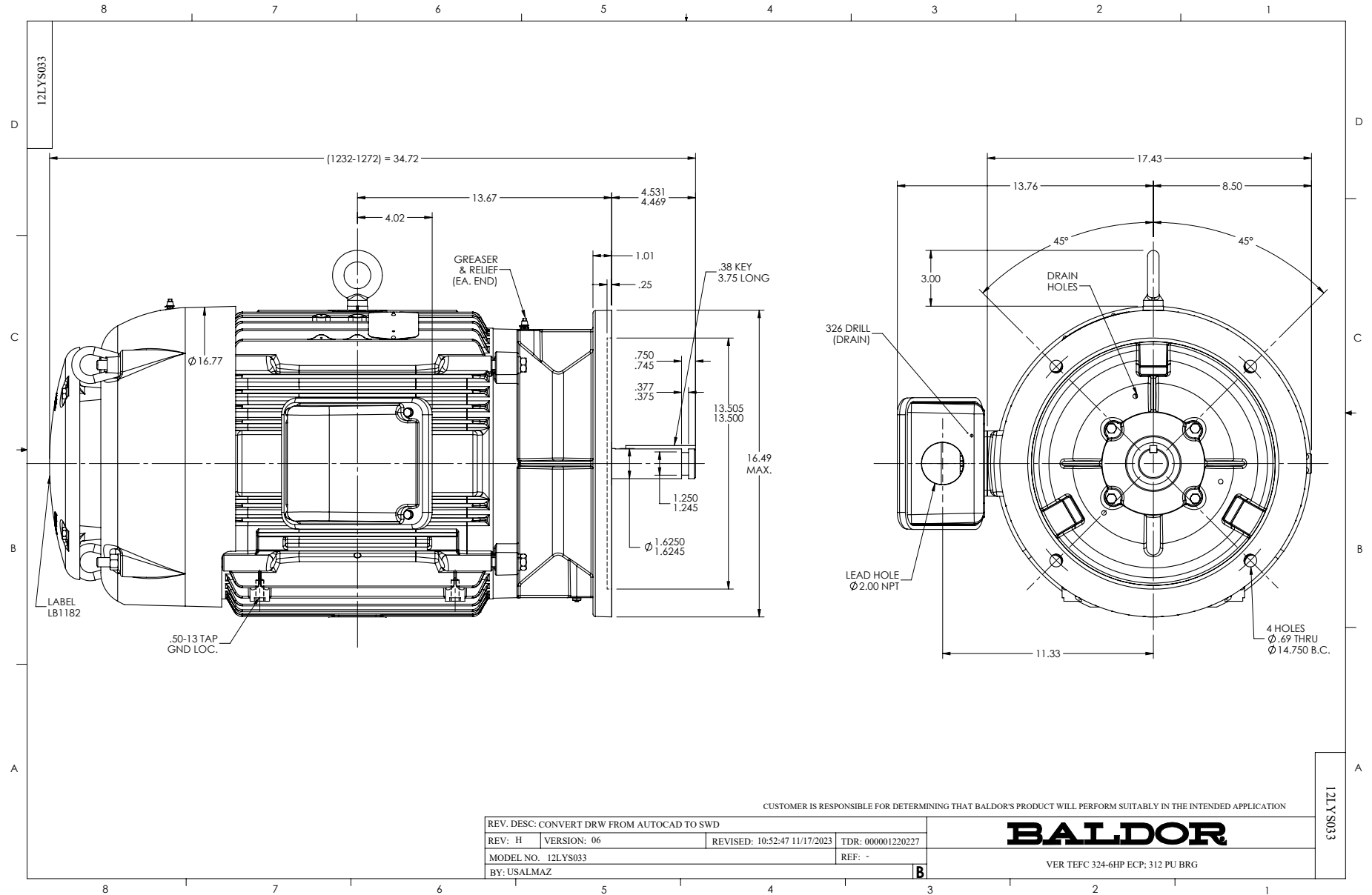
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

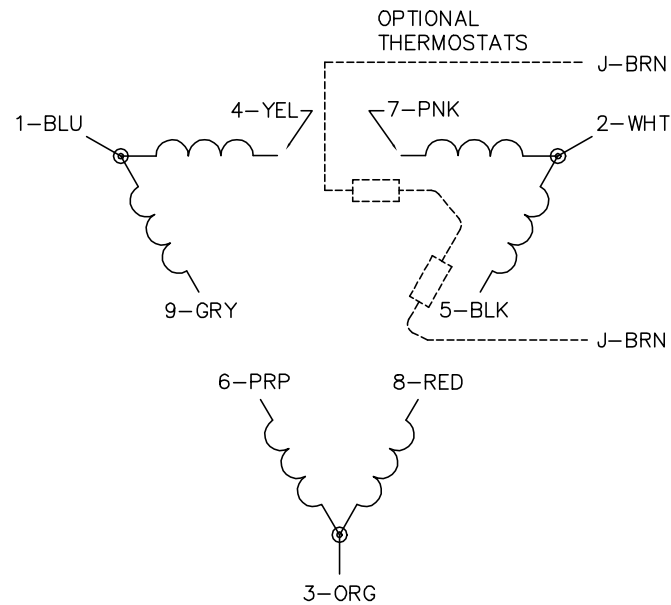
TORQUES (LB-FT): PO=396 PU=198 LR=222 LRA=347



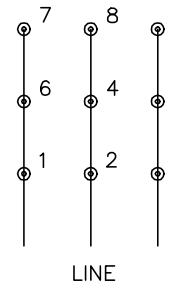
11/24/2024 ACPERF, record # 31673



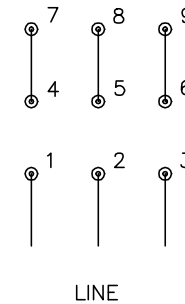
CD0180



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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1