

BALDOR® • RELIANCE 

Product Information Packet

EM2334T-58

20HP,1465RPM,3PH,50HZ,256T,0956M,TEFC,F1

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGZ534	CD Diagram:	CD0382	Mfg Plant:	
Mech. Spec:	09F103	Layout:	09LYF103	Poles:	04	Created Date:	12-05-2014
Base:	RG	Eff. Date:	03-09-2020	Leads:	6#12		

Specs			
Catalog Number:	EM2334T-58	Inverter Code:	Not Inverter
Enclosure:	TEFC	KVA Code:	H
Frame:	256T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	20.000 HP @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 12 AWG
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	400.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0956M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	84
	WEEE	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
	CE	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding

Current @ Voltage:	28.000 A @ 400.0 V	Shaft Rotation:	Reversible
Design Code:	A	Shaft Slinger Indicator:	Shaft Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Wye Start - Delta Run
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP3444L											
CAT NO	EM2334T-58										
SPEC.	09F103Z534G1										
HP	20							PH	3		
VOLTS	400										
AMP	28										
RPM	1465										
FRAME	256T				HZ	50			I.P.	54	
SER.F.	1.15		CODE	H		DES	A		CL	F	
NOM.EFF.	92.1										
PF	84			USABLE AT 208V							
RATING	40C AMB-CONT							CC			
DE BRG	6309				ODE	6208					
ENCL	TEFC			SN							
VPWM INVERTER READY											
CT5-50(10:1)VT2.5-50(20:1											
BLANK	IE3-92.3(75%)91.5(50%)										

Parts List		
Part Number	Description	Quantity
SA290869	SA 09F103Z534G1	1.000 EA
RA277020	RA 09F103Z534G1	1.000 EA
09FN3001C01	EXTERNAL FAN, PLASTIC	1.000 EA
09CB3000SP	CONDUIT BOX CAST	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
09EP1101A11SP	PU ENDPLATE, MACH	1.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
09FE1100A14	FREP ASSEMBLY, 09EP1100A14	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09FH1000	BALDOR MOTOR FAN COVER	1.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HA3113A05	THRUBOLT 3/8 - 16 X 17.250	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HA2081A05	SPACER TUBE, 309 FAN HSG, 2.00 LONG	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
09GS1001SP	GASKET-CONDUIT BOX LID, 1/16 THICK LEXID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0382	CONNECTION LABEL	1.000 EA
NP3444L	ALUM SUPER-E VPWM INV READY NEMA IE3 UL	1.000 EA
09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 EA
PE-0000003	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 48443 - Typical performance - not guaranteed values

Winding: 09WGZ534-R009	Type: 0956M	Enclosure: TEFC
-------------------------------	--------------------	------------------------

Nameplate Data				400 V, 50 Hz: Single Voltage Motor	
Rated Output (HP)	20			Full Load Torque	71.9 LB-FT
Volts	400			Start Configuration	direct on line
Full Load Amps	28			Breakdown Torque	369 LB-FT
R.P.M.	1465			Pull-up Torque	111 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	168 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	203 A
Service Factor (S.F.)	1.15			No-load Current	12.8 A
NEMA Nom. Eff.	92.1	Power Factor	84	Line-line Res. @ 25°C	0.324 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	78°C
S.F. Amps				Temp. Rise @ S.F. Load	96°C
				Locked-rotor Power Factor	36.6
				Rotor inertia	2.44 LB-FT ²

Load Characteristics 400 V, 50 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	66	77	84	86	87	85
Efficiency	87.2	91.5	92.3	92.2	91.3	89.8	91.7
Speed	1493	1485	1476	1468	1458	1445	1462
Line amperes	14.2	17.8	22.9	28.1	34.4	42.7	31.9

Performance Graph at 400V, 50Hz, 20.0HP Typical performance - Not guaranteed values

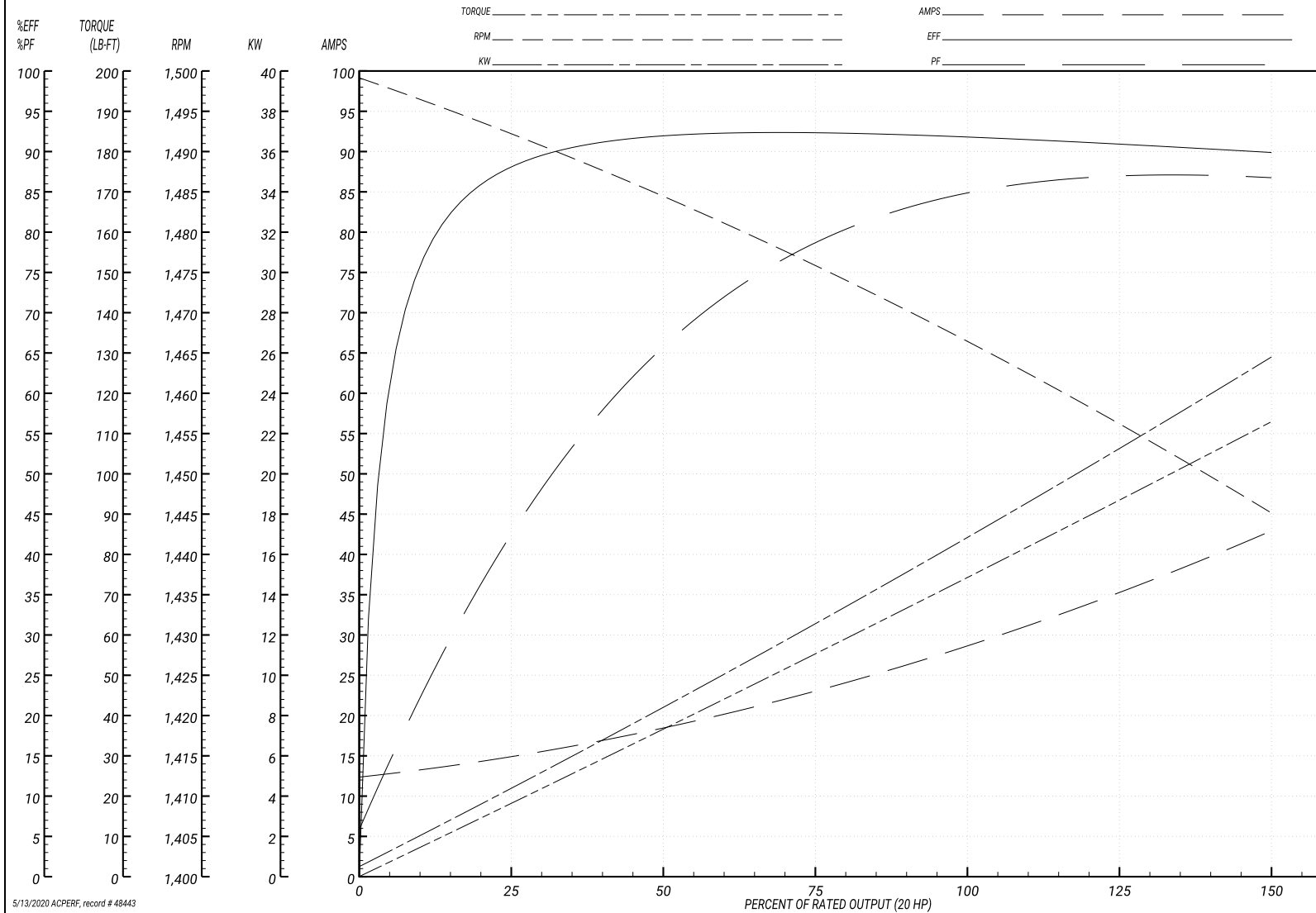
ABB Motors and Mechanical Inc.

WINDING # 09WGZ534

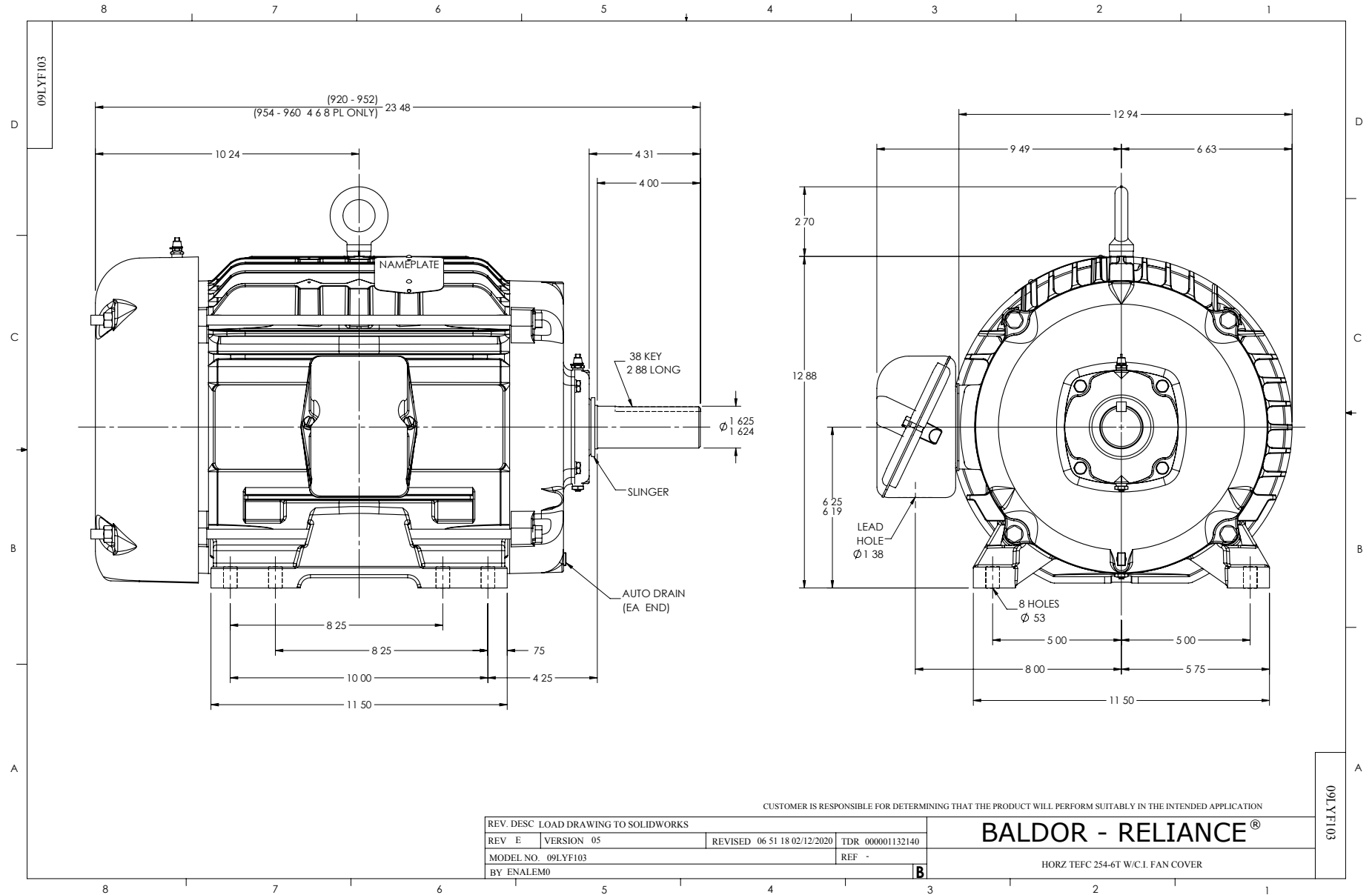
Typical performance - not guaranteed values.

20 HP 3 PH 50 HZ 1465 RPM 400 V 0956M

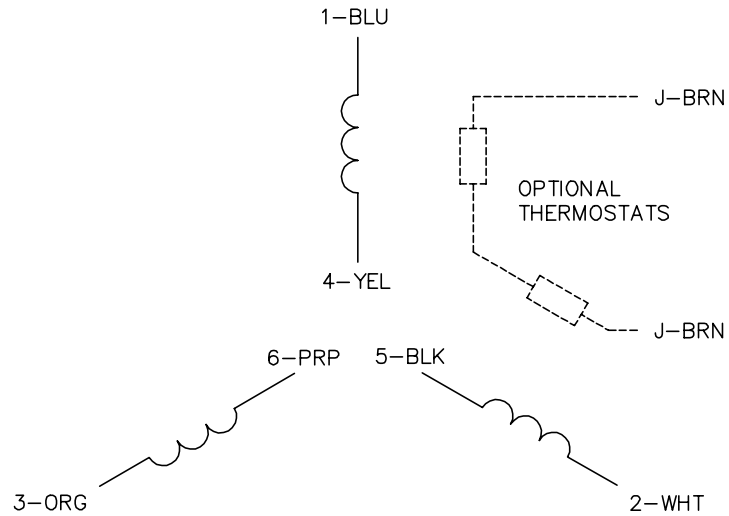
TORQUES(LB-FT): PO=369 PU=111 LR=168 LRA=203



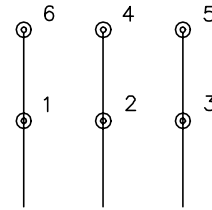
5/13/2020 ACPERF, record # 48443



CD0382

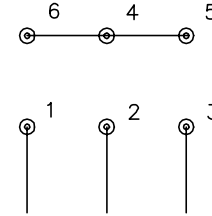


RUN CONNECTION
(1D)



LINE

START CONNECTION
(1Y)



LINE

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.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIRO
MTL: -	Ⓢ □	

BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN

SH 1 of 1

Marketing maintained PDF of MN416:

[MN416?ManNumber=MN416](#)