

**BALDOR • RELIANCE**

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# Customer information packet

## FSWDM41904T

30HP, 1775RPM, 3PH, 60HZ, 284T, 4074M, TEFC, F1

## Specifications

Enclosure	TEFC
Frame	284T
Frame Material	Stainless Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 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 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	37.000 A @ 460.0 V 74.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	37.0 a
Insulation Class	H

## Part detail

Revision	J
Type	AC
Mech. spec.	40E430
Base	
Status	PRD/A
Elec. spec.	40WGX291
Layout	40LYE430
Eff. date	12-18-2019
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	06-14-2017

Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4074M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.14 IN
Power Factor	82
Product Family	WD All SD Non-Encapsulated
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	Included
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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**

<b>NP1953A02</b>									
<b>CAT.NO.</b>	FSWDM41904T								
<b>SPEC.</b>	40E430X291G1								
<b>HP</b>	30								
<b>VOLTS</b>	230/460								
<b>AMP</b>	74/37								
<b>RPM</b>	1775								
<b>FRAME</b>	284T		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	H	<b>DES</b>	A	<b>CLASS</b>	H		
<b>NEMA-NOM-EFF</b>	93.6	<b>PF</b>	82						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A	<b>USABLE AT 208V</b>							
<b>DE</b>	6311	<b>ODE</b>	6311						
<b>ENCL</b>	TEFC	<b>SN</b>							
	3:1 CT/10:1 VT								

## Parts list

Part number	Description	Quantity
SA343414	SA 40E430X291G1	1.000 ea
RA331869	RA 40E430X291G1	1.000 ea
09FN3001A02SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
40CB1001A01	40 MACH. MID SECTION - 3 PC. CONDUIT BOX	1.000 ea
10XN2520S12	BOLT 1/4 - 20X 3/4 HEX HEAD SS (F/S)	4.000 ea
10XN2520S08	SCREW, 1/4-20 X 1/2 HHCS SS	4.000 ea
HW2502H28	#303 SS,SQ KEY 1/2 X 3.250	1.000 ea
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ1000B13	PETROLATUM, OR PETROLEUM JELLY	0.010 oz
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	4.000 ea
RM1070A82	O-RING, -055 VITON/FKM .070CS X 6.489 ID	1.000 ea
10XN2520G06	1/4 20X3/8 HX HD CAP, GREEN	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
40EP1901A02	FREP, MACH - 311 BRG WD11 SS	1.000 ea
RM1070A83	O-RING, VITON/FKM .070CS X 12.500 ID	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HW4600H05	55 X 75 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4600G75	55 X 75 X 5.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW4600H05	55 X 75 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4600G75	55 X 75 X 5.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
40EP1901B03	PUEP, MACH - 311 BRG WD11 SS	1.000 ea
RM1070A83	O-RING, VITON/FKM .070CS X 12.500 ID	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
RM1070A78	O-RING, -012 VITON/FKM .070CS X .364ID	4.000 ea
40CB1500A01	40 MACH. LID - 3 PC. SS CONDUIT BOX	1.000 ea
RM1070A82	O-RING, -055 VITON/FKM .070CS X 6.489 ID	1.000 ea
51XB1214S20	12-14X1.25 HXWSSLD SERTYB, SS	1.000 ea

10FH4018A01	304 SS FAN HOUSING & BASE PLATE FOR HORZ	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW2502F10	KEY, 5/16 SQ X 1.000 303 STAIMLESS STEEL	1.000 ea
HA3105FS16	THRUBOLT, 3/8-16 X 18.750 SS FOOD SAFE	4.000 ea
WD4006A11	WIRE JOINT, 6-14 AWG, SILICONE FILLED	6.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2100bx)4/22	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

**AC Induction Motor Performance Data**

Record # 68511

Typical performance - not guaranteed values

Winding: 40WGx291-R001		Type: 4074M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	30	Full Load Torque	88.96 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	74/37	Breakdown Torque	336 LB-FT
R.P.M.	1775	Pull-up Torque	132 LB-FT
Hz	60 Phase	Locked-rotor Torque	173 LB-FT
NEMA Design Code	A KVA Code	Starting Current	267 A
Service Factor (S.F.)	1.15	No-load Current	15.9 A
NEMA Nom. Eff.	93.6 Power Factor	Line-line Res. @ 25°C	0.18115 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	73°C
S.F. Amps		Temp. Rise @ S.F. Load	85°C
		Locked-rotor Power Factor	29.8
		Rotor inertia	5.89 lb-ft <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 30 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	66	77	82	84	85	83
Efficiency	88.3	92.6	93.7	93.8	93.6	93	93.7
Speed	1793.4	1787.8	1782.2	1776.1	1769.6	1761.9	1772
Line amperes	18.2	23	29.4	36.7	44.5	53.2	41.4

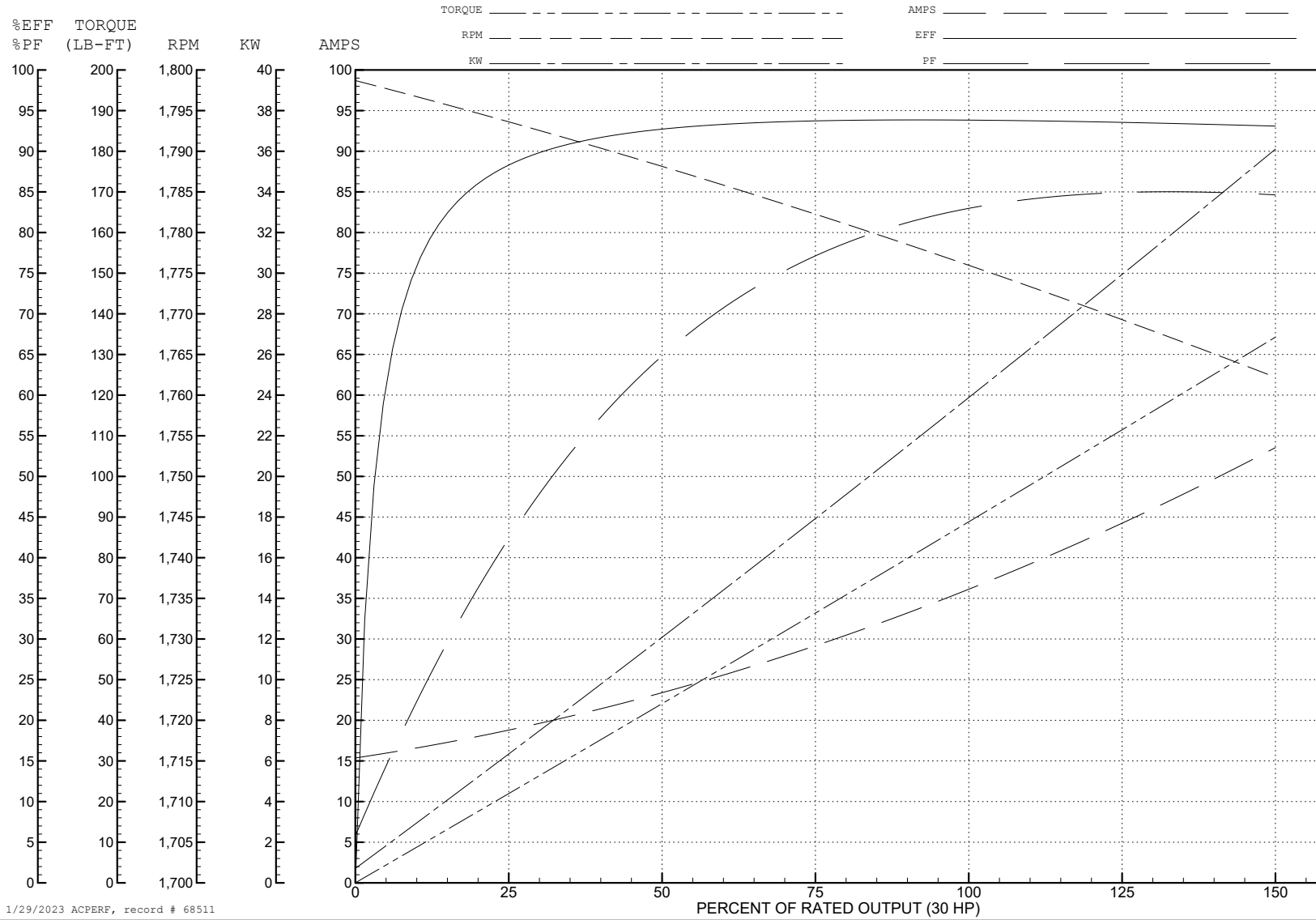
ABB Motors and Mechanical Inc.

WINDING # 40WGx291

Typical performance - not guaranteed values.

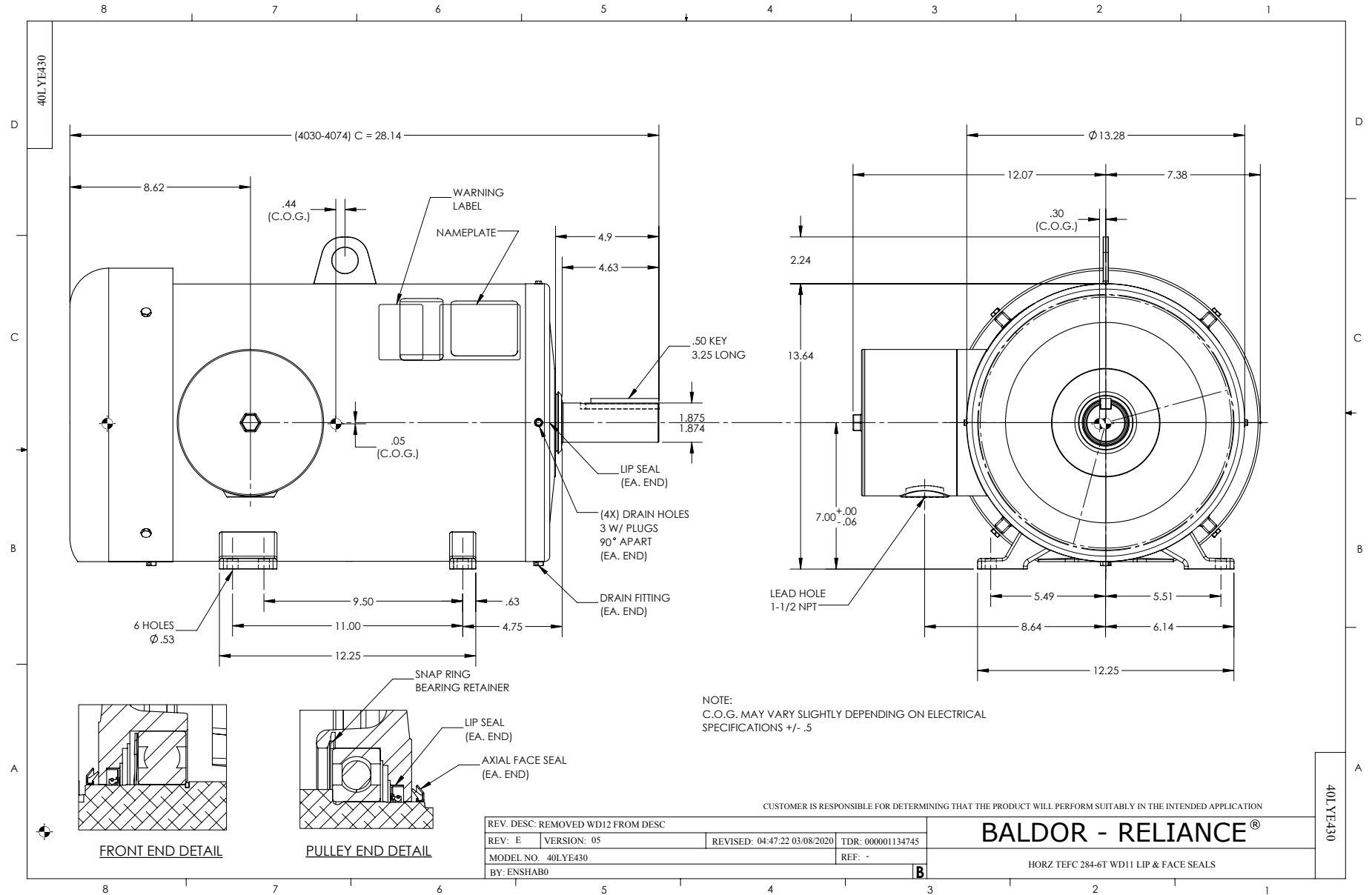
30 HP 3 PH 60 HZ 1775 RPM 460 V 4074M

TORQUES (LB-FT): PO=336 PU=132 LR=173 LRA=267

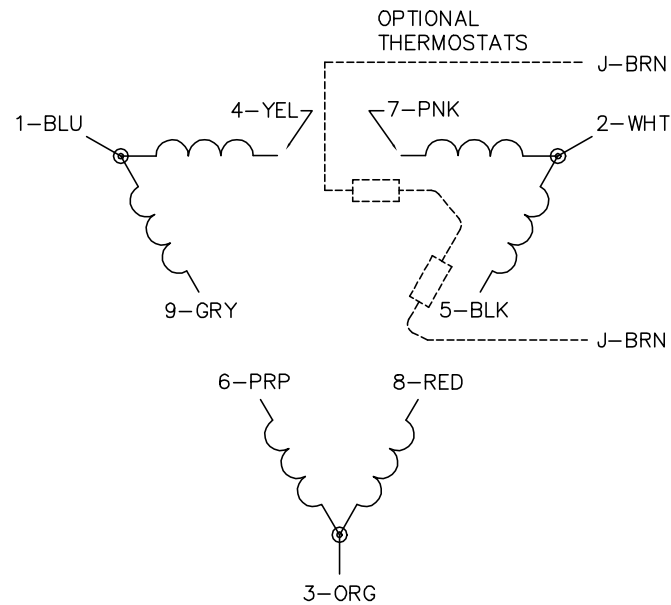


1/29/2023 ACPERF, record # 68511

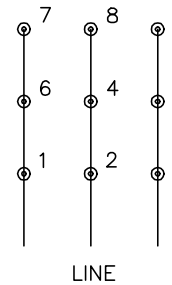




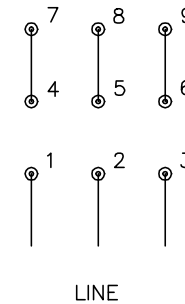
CD0180



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		
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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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