ABB BALDOR RELIANCE

Customer information packet

8102W

24M 4P GRNDR

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/9/2026 12:59:59 PM

Specifications

Enclosure	TENV
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
	50.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Nameplate Output	.75
Number of Poles	4
	4
Output @ Frequency	.750 HP @ 60 HZ
	.750 HP @ 50 HZ
Phase	3
	3
Shaft Diameter	0.750 IN
	0.750 IN
Speed	1500 rpm
	1800 rpm
	1500 rpm
	1800 rpm
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage	208 V
	230 V
	460 V
Voltage @ Frequency	208.0 V @ 50 HZ
	208.0 V @ 60 HZ
	460.0 V @ 60 HZ
	460.0 V @ 50 HZ
	230.0 V @ 60 HZ
	230.0 V @ 50 HZ
Agency Approvals	CSA
Ambient Temperature	40 °C
Base Indicator	Rigid

Part Detail

Revision	A
Type	AC
Mech. spec.	G8-166
Base	
Status	PRD/A
Elec. spec.	G8WG0377
Layout	G8LY0166
Eff. date	07-17-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-23-2023

Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	3.000 A @ 230.0 V
	3.000 A @ 208.0 V
	1.500 A @ 460.0 V
Design Code	-
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Insulation Class	B
KVA Code	-
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Standards	Other
Motor Type	3524M
Mounting Arrangement	F1
Overall Length	23.24 IN
Product Family	Grinder
Service Factor	1.00
Shaft Rotation	Phase Seq-Opp Std Rot (CWODE)
Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0113			
CAT.NO.	8102W		
HP	.75	**VOLTS**	208-230/460
PHASE	3	**AMPS**	3/1.5
HZ	50//60	**RPM**	1500//1800
SER.NO			
SPEC.	G8-166G0377		

Accessories

Part number	Description	Multiplier
GA16	PEDESTAL INDUSTRIAL, CAST IRON 6" - 10"	A8
GA14	PEDESTAL FABRICATED STEEL W/SHELVES	A8
GA20	PEDESTAL INDUSTRIAL, CAST IRON 8"-14"	A8
GA20E	PEDESTAL LIGHT INDUSTRIAL,STEEL	A8
GA24	WATER POT	A8
B80	8" 36 GRIT GRINDING WHEEL	A8
B81	8" 60 GRIT GRINDING WHEEL	A8
GA9	PAIR LIGHTED EYESHIELDS	A8
GA9-1	SINGLE LIGHTED EYESHIELD	A8
GA9S	PAIR EYESHIELDS W/ ON-OFF SWITCH	A8
GA11	PAIR EYESHIELDS	A8
DC8	DUST CONTROL UNIT	A8

AC Induction Motor Performance Data
Record # 91058
Preliminary Data Sheet

Winding: G8WG0377-R001	**Type:** G824M	**Enclosure:** TENV

Nameplate Data			
Rated Output (HP)			.75
Volts			208-230/460
Full Load Amps			2.75-2.9/1.45//2.48-2.4/1.2
R.P.M.			1500//1800
Hz	50//60	**Phase**	3
NEMA Design Code	-	**KVA Code**	-
Service Factor (S.F.)			1
NEMA Nom. Eff.	0	**Power Factor**	0
Rating - Duty			40C AMB-CONT

460 V, 50 Hz: High Voltage Connection	
Full Load Torque	2.69 LB-FT
Start Configuration	direct on line
Breakdown Torque	15.71 LB-FT
Pull-up Torque	12.63 LB-FT
Locked-rotor Torque	14.64 LB-FT
Starting Current	13.78 A
No-load Current	1.3 A
Line-line Res. @ 25ºC	24 Ω
Temp. Rise @ Rated Load	77°C
Locked-rotor Power Factor	83.3954
Rotor inertia	0.173 lb-ft²

Load Characteristics 460 V, 50 Hz, 0.75 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	24	36	47	58	66	72
Efficiency	57.6	71.5	77.2	79	80	79.8
Speed	1489	1480	1470	1460	1449	1438
Line amperes	1.31	1.35	1.43	1.54	1.67	1.83

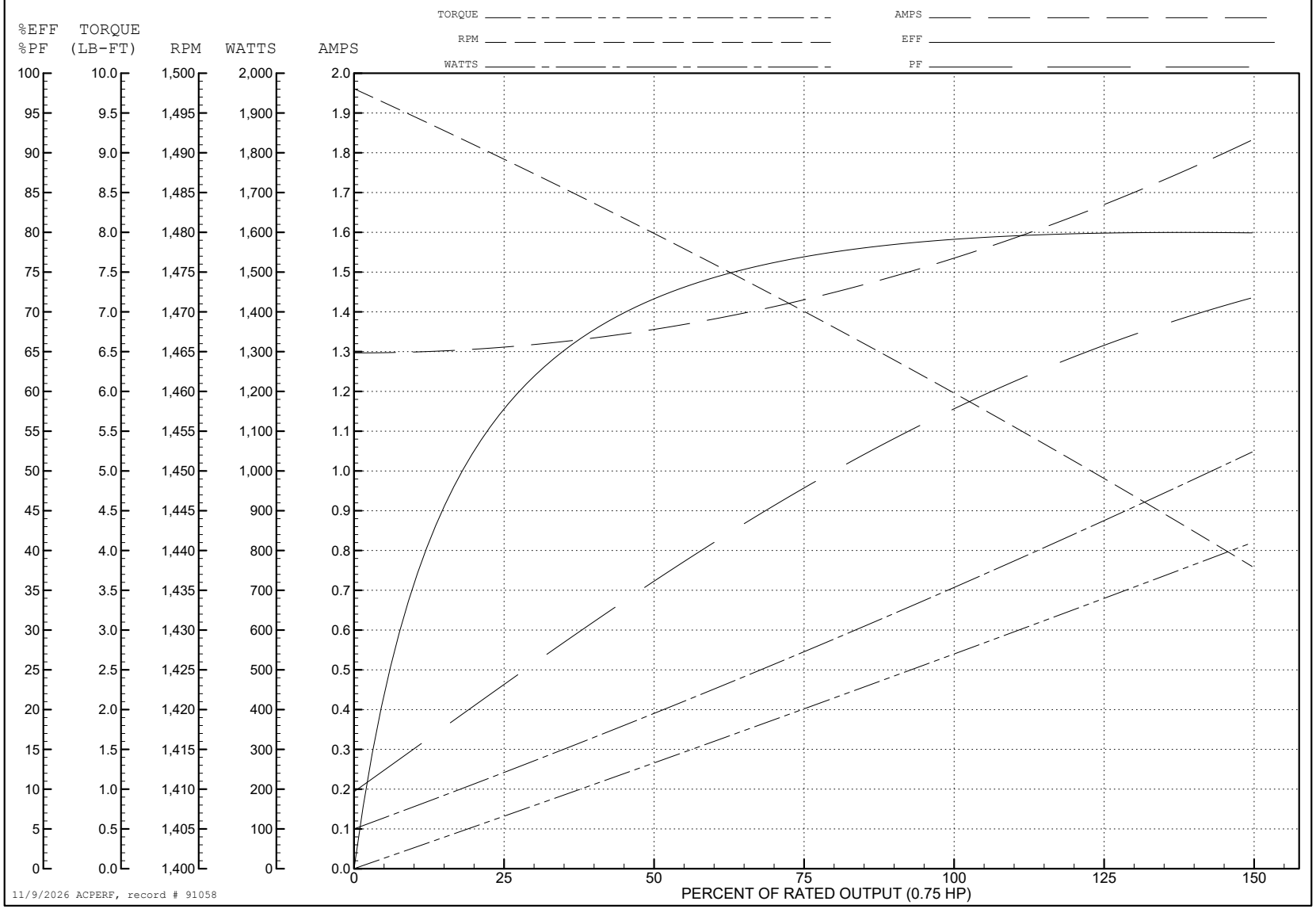
ABB Motors and Mechanical Inc.

WINDING # G8WG0377

0.75 HP 3 PH 50 HZ 1460 RPM 460 V G824M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=15.71 PU=12.63 LR=14.64 LRA=13.78



11/9/2026 ACPERF, record # 91058

AC Induction Motor Performance Data
Record # 91059
Preliminary Data Sheet

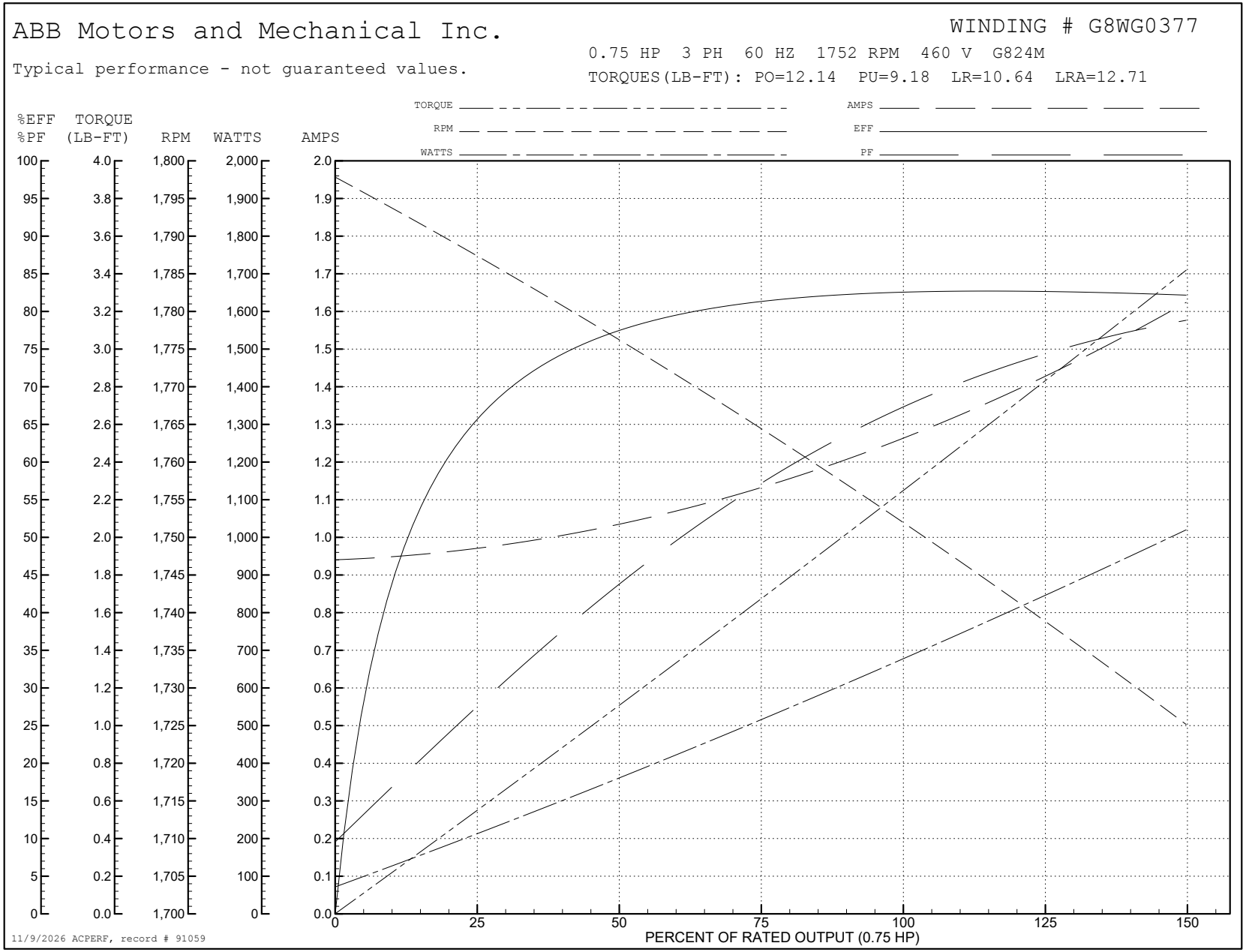
Winding: G8WG0377-R001	**Type:** G824M	**Enclosure:** TENV

Nameplate Data			
Rated Output (HP)			.75
Volts			208-230/460
Full Load Amps			2.75-2.9/1.45//2.48-2.4/1.2
R.P.M.			1500//1800
Hz	50//60	**Phase**	3
NEMA Design Code	-	**KVA Code**	-
Service Factor (S.F.)			1
NEMA Nom. Eff.	0	**Power Factor**	0
Rating - Duty			40C AMB-CONT

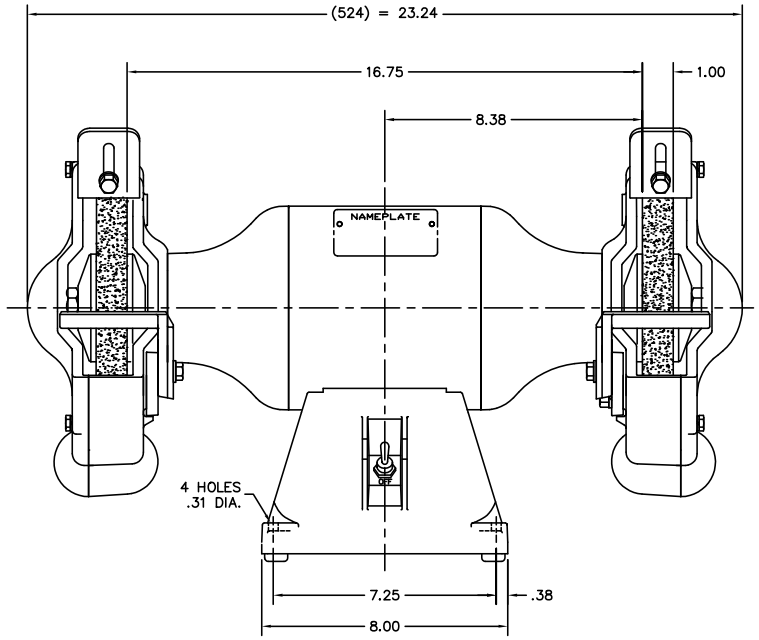
460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.25 LB-FT
Start Configuration	direct on line
Breakdown Torque	12.14 LB-FT
Pull-up Torque	9.18 LB-FT
Locked-rotor Torque	10.64 LB-FT
Starting Current	12.71 A
No-load Current	0.946 A
Line-line Res. @ 25ºC	24 Ω
Temp. Rise @ Rated Load	55°C
Locked-rotor Power Factor	77.6342
Rotor inertia	0.173 lb-ft²

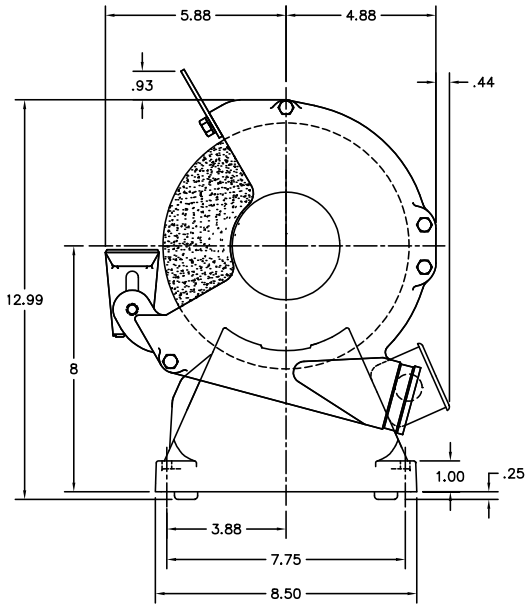
Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	28	44	57	67	74	79
Efficiency	65.5	77	81.4	82.7	82.7	82
Speed	1787	1776	1765	1752	1739	1725
Line amperes	0.965	1.03	1.13	1.27	1.43	1.62


ABB Motors and Mechanical Inc.
WINDING # G8WG0377
Typical performance - not guaranteed values.
0.75 HP 3 PH 60 HZ 1752 RPM 460 V G824M
TORQUES(LB-FT): PO=12.14 PU=9.18 LR=10.64 LRA=12.71
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/9/2026 ACPERF, record # 91059

G8LY0166





CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

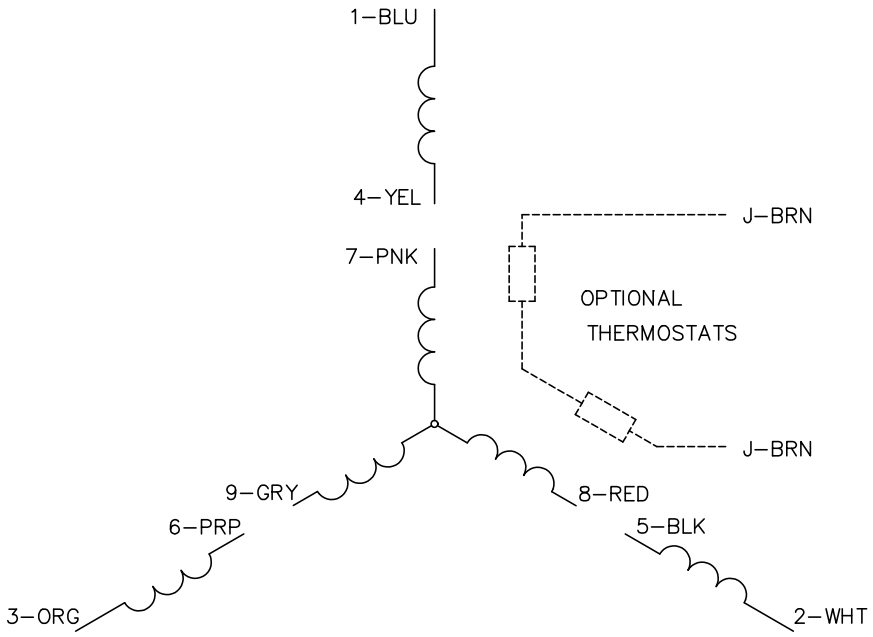
REV. DESC: OMITTED FELT WSHR HA1025A03 & CHG'D TO SEALED BRGS			
REV. LTR: H	BY: SSS	REVISED: 09/29/00 12:54	TDR: 0212666
FILE: AAA00064345			REF: –
MTL: –			

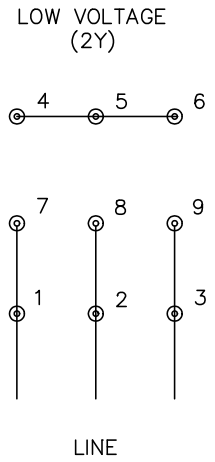
BALDOR ELECTRIC Co.

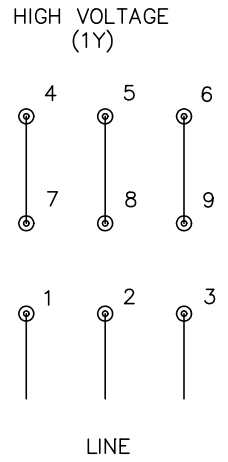
8" GRINDER TENV MODEL 524M

G8LY0166

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