

Dimensional Drawing



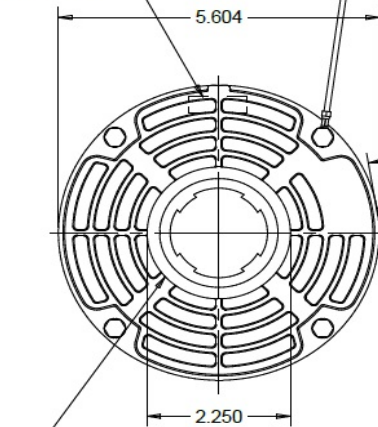
3LU85BH

REV.
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MODEL	REF	CUSTOMER	HP	VOLTS	AMPS	HZ	RPM	ROTATION	CUSTOMER PN	SAB	DESCRIPTION / REMARKS
K55HXRJN-2172	E41272-X2	DAYTON	3/4	115	8.9	60	1625	C.CW. LEAD END REV	3LU85BH	SAB	

#16 GRN/YEL GROUND LEAD TO BE 12±.250 BETWEEN CENTERS OF TERMS. TERM. TO FIT #10 SCREW.

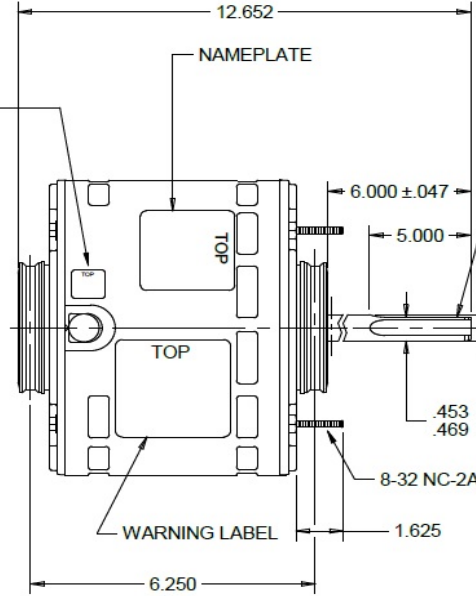
AUTOMATIC THERMAL PROTECTOR



SEAM WELD

6 LEADS, #18, .031 THICK INSUL. TO EXTEND BEYOND MOTOR.
WHT = 30.000 +2 -0, BLK = 30.000 +2 -0,
BLU = 30.000 +2 -0, RED = 30.000 +2 -0,
BRN = 30.000 +2 -0, BRN/WHT = 30.000 +2 -0

WARNING LABEL TO BE ADJACENT TO REVERSING LEADS



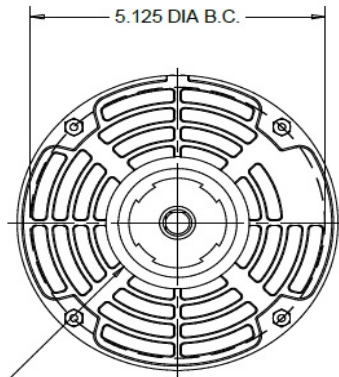
NAMEPLATE

TOP

TOP

WARNING LABEL

DOUBLE SHAFT FLAT 90° APART



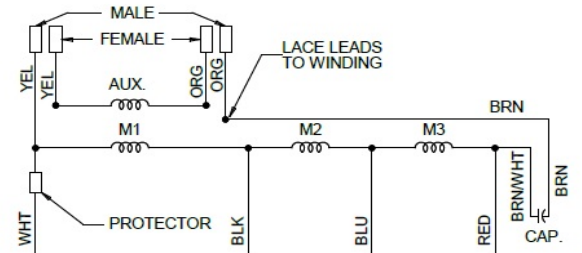
INCLUDE KIT FOR 2.5 HUB RING ASSEMBLY

.750±.062 SKINNED

(2).250 FLAG TYPE Q.C. TERMS.

ROTATION: CCW VIEWING LEAD END WITH ORG-ORG AND YEL-YEL TO REV. ROTATION INTERCHANGE ORG. AND YEL LEADS.

ROTATION: C.CW. LEAD END REV



DIMENSIONS UNITS, INCHES

DRAWING NO.	PAGE 1 of 1	REV.
3LU85BH		-

3LU85BH

REV.
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SHADED-POLE & PSC MOTOR PERFORMANCE

HP:	3/4							
Poles:	4							
Ambient (°C):	40							
Altitude (FASL):	1000							
No. of Speeds:	3							
HIGH SPEED								
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Service Factor:	1.0							
Efficiency:	@ Rated Load	61.9						
Power Factor:	@ Rated Load	98.5						
Amps:	@ No Load							
	@ Rated Load	8.8						
	@ Locked Rotor							
RPM:	@ Rated Load	1625						
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	49.8						
	Locked Rotor	11.3						
	Pull-Up	11.2						
	Rated Load	43.0						
	Service Factor	1.0						
Watts:	Rated Load	1001.1						
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)	140~150						
Winding Material:	Start (Auxiliary)	AL						
	Run (Main)	AL Copper						
Capacitor:	Run (MFD / Volts)	15.0 MFD 370V						
	No. of Run Capacitors	1						

MEDIUM-HIGH SPEED

HP:	3/4							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load	63.8						
Power Factor:	@ Rated Load	99.2						
Amps:	@ No Load							
	@ Rated Load	4.8						
	@ Locked Rotor							
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	28.6						
	Locked Rotor	7.1						
	Pull-Up	7.2						
	Rated Load	24.3						
Watts:	Rated Load	549						
Temperature Rise:	@ Rated Load							

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3LU85BH -

3LU85BH

REV.

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SHADED-POLE & PSC MOTOR PERFORMANCE

MEDIUM-LOW SPEED

HP:	3/4							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load							
Power Factor:	@ Rated Load							
Amps:	@ No Load							
	@ Rated Load							
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown							
	Locked Rotor							
	Pull-Up							
	Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
Watts:	Rated Load							
Temperature Rise:	@ Rated Load							
Thermal Protector:	Trip Temp (°C)							
Winding Material:	Start (Auxiliary)							
	Run (Main)							

LOW SPEED

HP:	3/4							
Volts:	115	115	208	230	277	460	100	200
HZ:	60	60	60	60	60	60	50	50
Efficiency:	@ Rated Load	64.4						
Power Factor:	@ Rated Load	98.5						
Amps:	@ No Load							
	@ Rated Load	3.1						
Torques: Oz.Ft. / Lb.In. (Circle One)	Breakdown	18.5						
	Locked Rotor	4.9						
	Pull-Up	5.0						
	Rated Load	15.4						
Watts:	Rated Load	346.0						
Temperature Rise:	@ Rated Load							

Notes:

DRAWING NO. PAGE REV.
3LU85BH -

Performance Data



3LU85BH

REV.

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Dayton Manufacturing Company

Filtered

Motor Description

Model: 3LU85BH
 Motor ID: 1 of 2
 Poles: 4
 Volts: 115
 Frequency: 60
 HP: 3/4
 Speed: 1625
 Phase: 1
 Protector: 7AM036-A5

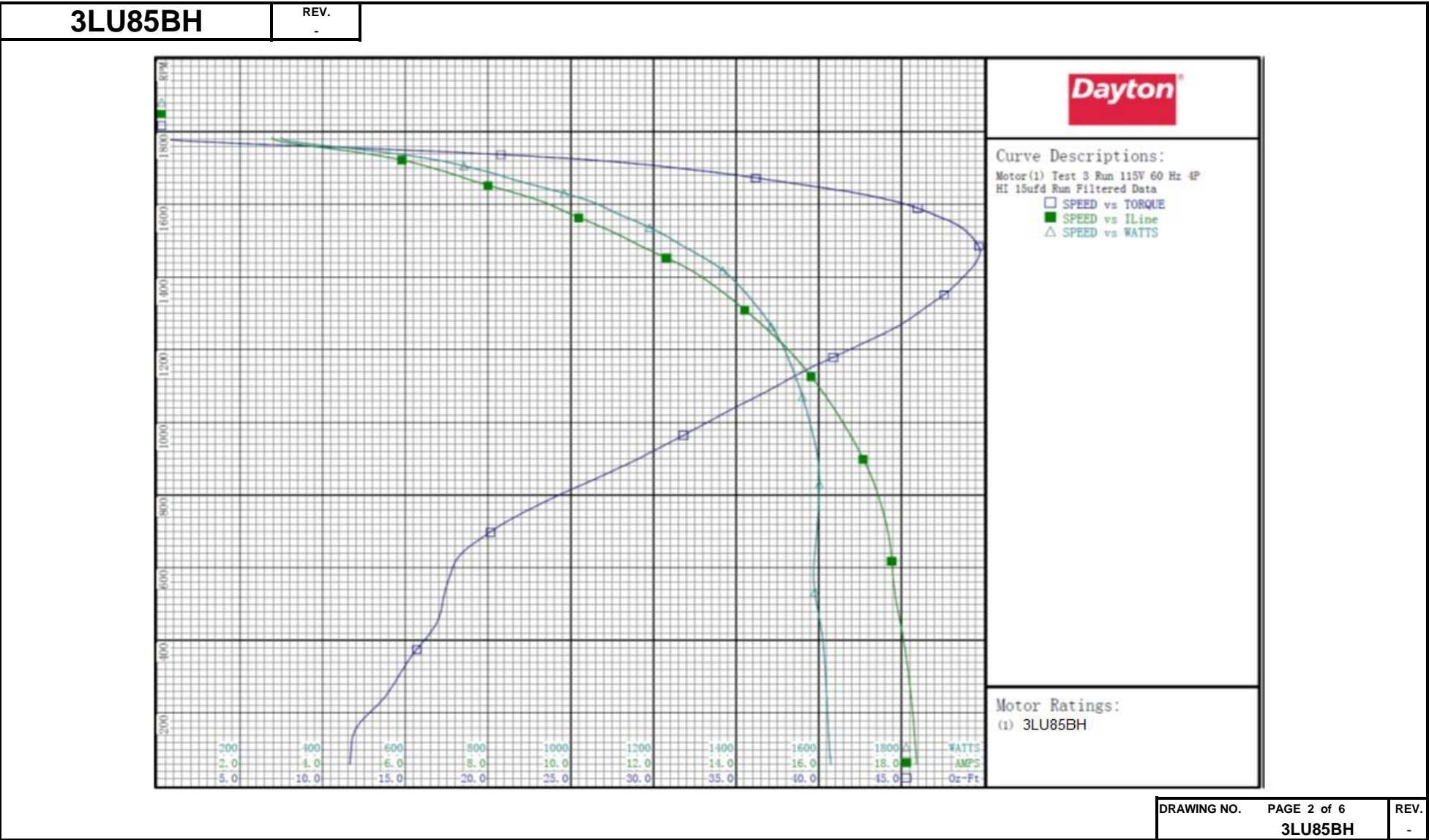
Test Conditions

Test Type: Run
 Test Number: 3
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn: HI
 TestBoard: NMQC Plotter Fixture #1
 Run Cap: 15
 Start Cap: 0µfd
 Environment:
 Tested: 7/27/2015 1:10:09 PM
 Tested By: Liu, Bingmin
 Gear Ratio: 1:1
 Bearing Friction: -0.34 Oz-Ft
 Windage Torque: -0.79 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	386.3	428.1	2.778	298.4	1785	0.00	0.000	0.0	0.0
	115.0	384.6	426.2	2.855	309.1	1777	1.00	0.021	4.7	0.0
	115.0	372.3	407.0	3.978	447.0	1756	11.13	0.233	37.8	0.0
	115.0	358.4	385.0	5.186	590.5	1737	20.80	0.430	55.4	0.0
	115.0	341.1	363.1	6.068	693.7	1718	27.38	0.560	60.5	0.0
	115.0	326.2	346.4	6.747	773.1	1697	32.04	0.647	62.5	0.0
	115.0	312.1	331.3	7.416	847.9	1673	36.19	0.721	63.4	0.0
0.75 HP	115.0	306.1	324.7	7.731	882.8	1661	37.92	0.750	63.4	0.0
	115.0	298.1	316.2	8.165	930.1	1647	40.04	0.785	63.0	0.0
1625 RPM	115.0	285.8	303.3	8.840	1001.1	1625	42.96	0.831	61.9	0.0
	115.0	282.8	300.2	9.002	1017.7	1619	43.56	0.840	61.6	0.0
	115.0	269.3	287.0	9.688	1085.6	1589	45.99	0.870	59.8	0.0
	115.0	256.3	274.5	10.343	1150.0	1557	47.78	0.885	57.4	0.0
	115.0	242.0	261.2	11.054	1216.3	1522	49.01	0.888	54.4	0.0
	115.0	228.6	249.8	11.709	1272.7	1484	49.67	0.878	51.4	0.0
BDT OZ-FT	115.0	224.3	246.1	11.931	1291.5	1472	49.75	0.872	50.4	0.0
	115.0	213.6	237.1	12.474	1335.2	1444	49.55	0.852	47.6	0.0
	115.0	199.2	225.7	13.169	1386.4	1400	48.72	0.812	43.7	0.0
	115.0	186.4	216.4	13.756	1426.9	1351	47.57	0.765	40.0	0.0
	115.0	173.7	208.2	14.330	1464.8	1298	45.92	0.709	36.1	0.0
	115.0	161.6	201.0	14.888	1498.1	1241	43.78	0.647	32.2	0.0
	115.0	149.0	194.5	15.421	1524.8	1179	40.89	0.574	28.1	0.0
	115.0	137.4	189.7	15.904	1548.0	1113	37.95	0.502	24.2	0.0
	115.0	126.9	186.2	16.350	1568.1	1041	34.96	0.433	20.6	0.0
	115.0	116.7	183.6	16.764	1586.0	965	31.83	0.366	17.2	0.0
	115.0	107.0	181.7	17.148	1599.6	882	28.28	0.297	13.8	0.0
	115.0	96.6	180.3	17.450	1600.3	794	23.97	0.226	10.5	0.0
	115.0	86.0	179.3	17.672	1595.1	698	20.13	0.167	7.8	0.0
	115.0	75.5	180.5	17.779	1587.6	597	17.83	0.126	5.9	0.0
	115.0	69.4	186.4	17.899	1596.5	490	17.19	0.100	4.7	0.0
	115.0	67.5	192.8	18.086	1611.9	375	15.68	0.070	3.3	0.0
	115.0	65.6	197.6	18.223	1618.5	253	13.90	0.042	1.9	0.0
	115.0	62.8	202.4	18.326	1624.5	124	11.76	0.017	0.8	0.0

DRAWING NO. PAGE 1 of 6 REV.
 3LU85BH -

Performance Data



Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

Performance Data



3LU85BH

REV.

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Dayton Manufacturing Company

Filtered

Motor Description

Model: 3LU85BH
 Motor ID: 1 of 2
 Poles: 4
 Volts: 115
 Frequency: 60
 HP: 3/4
 Speed: 1625
 Phase: 1
 Protector: 7AM036-A5

Test Conditions

Test Type: Run
 Test Number: 8
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation:
 Special Conn: MED
 TestBoard: NMQC Plotter Fixture #1
 Run Cap: 15
 Start Cap: 0µfd
 Environment:
 Tested: 7/27/2015 1:05:31 PM
 Tested By: Liu, Bingmin
 Gear Ratio: 1:1
 Bearing Friction: -0.37 Oz-Ft
 Windage Torque: -0.84 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq (Oz-ft)	HP	Eff (%)	PF (%)
	115.0	300.1	325.7	1.963	185.8	1785	0.00	0.000	0.0	0.0
	115.0	299.3	323.6	2.042	198.6	1777	0.83	0.017	6.3	0.0
	115.0	287.2	305.4	2.628	284.7	1757	7.44	0.155	39.8	0.0
	115.0	273.2	286.9	3.117	351.9	1736	12.60	0.260	56.3	0.0
	115.0	260.4	272.5	3.404	389.0	1715	15.40	0.315	60.5	0.0
	115.0	248.0	258.9	3.769	434.0	1693	18.24	0.368	63.2	0.0
	115.0	235.7	245.9	4.171	480.5	1669	20.88	0.415	64.4	0.0
	115.0	224.6	234.9	4.544	520.9	1644	22.94	0.449	64.3	0.0
1625 RPM	115.0	216.9	227.6	4.812	549.1	1625	24.26	0.469	63.8	0.0
	115.0	214.1	225.0	4.905	558.6	1617	24.66	0.475	63.4	0.0
	115.0	204.9	216.5	5.242	591.1	1588	26.05	0.492	62.2	0.0
	115.0	193.4	205.5	5.730	635.8	1557	27.44	0.509	59.7	0.0
	115.0	181.3	194.8	6.196	677.4	1524	28.23	0.512	56.4	0.0
	115.0	171.5	186.9	6.539	705.1	1486	28.58	0.506	53.5	0.0
BDT OZ-FT	115.0	162.1	179.9	6.877	731.3	1446	28.64	0.493	50.3	0.0
	115.0	162.1	179.9	6.877	731.3	1446	28.64	0.493	50.3	0.0
	115.0	152.0	172.5	7.238	758.3	1403	28.40	0.474	46.6	0.0
	115.0	141.8	165.9	7.605	783.0	1355	27.80	0.448	42.7	0.0
	115.0	131.8	160.0	7.954	804.4	1304	26.75	0.415	38.5	0.0
	115.0	122.6	155.5	8.270	822.4	1248	25.62	0.381	34.5	0.0
	115.0	114.4	152.1	8.557	838.7	1187	24.55	0.347	30.9	0.0
	115.0	106.3	149.2	8.845	853.3	1122	23.07	0.308	26.9	0.0
	115.0	97.9	147.2	9.108	862.4	1052	21.06	0.264	22.8	0.0
	115.0	89.9	146.0	9.338	868.9	975	19.00	0.220	18.9	0.0
	115.0	82.7	145.5	9.552	875.7	893	17.06	0.181	15.4	0.0
	115.0	75.6	145.3	9.745	880.1	805	14.97	0.143	12.2	0.0
	115.0	68.4	145.1	9.903	881.2	711	12.83	0.109	9.2	0.0
	115.0	61.1	146.3	9.986	876.0	610	10.92	0.079	6.7	0.0
	115.0	56.4	150.7	10.053	876.8	503	10.01	0.060	5.1	0.0
	115.0	54.6	155.1	10.164	883.8	389	9.04	0.042	3.5	0.0
	115.0	52.9	158.1	10.262	890.4	268	8.25	0.026	2.2	0.0
	115.0	51.1	161.7	10.305	894.4	139	7.61	0.012	1.0	0.0

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 3LU85BH -

Performance Data



3LU85BH

REV.

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Dayton Manufacturing Company

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Motor Description

Model: 3LU85BH
 Motor ID: 1 of 2
 Poles: 4
 Volts: 115
 Frequency: 60
 HP: 3/4
 Speed: 1625
 Phase: 1
 Protector: 7AM036-A5

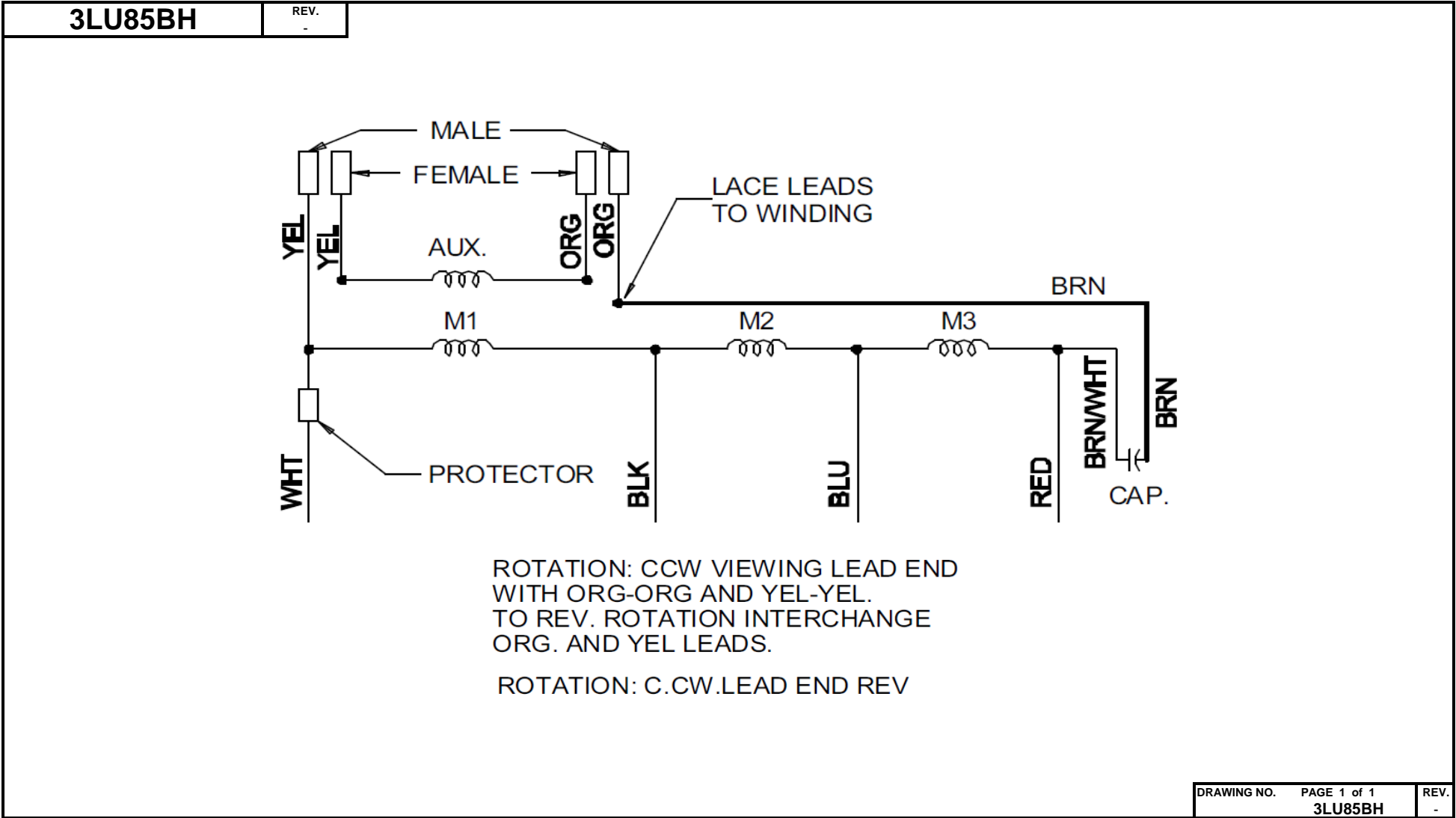
Test Conditions

Test Type: Run
 Test Number: 12
 Poles: 4
 Volts: 115
 Hz: 60
 Rotation:
 Special Cond:
 Speed Conn: LOW
 TestBoard: NMQC Plotter Fixture #1
 Run Cap: 15
 Start Cap: 0µfd
 Environment:
 Tested: 7/27/2015 11:23:49 AM
 Tested By: Liu, Bingmin
 Gear Ratio: 1:1
 Bearing Friction: -0.42 Oz-Ft
 Windage Torque: -0.83 Oz-Ft

Special Points	Vline (V)	Vaux (V)	Vcap (V)	Iline (A)	Watts	RPM	Tq(Oz-ft)	HP	Eff (%)	PF (%)
	115.0	243.6	262.2	1.320	122.0	1782	0.000	0.000	0.0	0.0
	115.0	242.3	260.2	1.387	133.0	1775	0.700	0.015	7.9	0.0
	115.0	234.4	247.4	1.719	182.0	1753	4.415	0.092	36.6	0.0
	115.0	219.2	227.5	2.090	234.9	1731	8.685	0.179	57.9	0.0
	115.0	208.9	216.7	2.228	253.6	1710	10.127	0.206	60.9	0.0
	115.0	198.0	205.3	2.456	282.2	1687	11.911	0.239	63.2	0.0
	115.0	186.9	194.4	2.736	312.5	1664	13.704	0.271	64.8	0.0
	115.0	178.8	186.6	2.951	335.4	1639	14.943	0.292	64.9	0.0
1625 RPM	115.0	175.1	183.2	3.053	346.0	1625	15.433	0.299	64.4	0.0
	115.0	171.8	180.0	3.153	356.4	1612	15.920	0.306	64.0	0.0
	115.0	163.8	172.7	3.394	380.1	1584	16.861	0.318	62.4	0.0
	115.0	156.3	166.3	3.612	400.3	1553	17.568	0.325	60.5	0.0
	115.0	148.0	159.3	3.872	423.8	1519	18.213	0.329	58.0	0.0
	115.0	138.6	151.8	4.159	447.8	1482	18.479	0.326	54.3	0.0
	115.0	130.7	146.1	4.393	465.8	1442	18.530	0.318	50.9	0.0
BDT OZ-FT	115.0	129.2	145.1	4.436	469.0	1433	18.544	0.316	50.3	0.0
	115.0	123.0	141.1	4.616	482.3	1398	18.420	0.307	47.4	0.0
	115.0	115.1	136.3	4.848	498.3	1350	18.087	0.291	43.5	0.0
	115.0	107.6	132.4	5.051	511.6	1299	17.547	0.271	39.5	0.0
	115.0	100.3	129.2	5.252	523.9	1243	16.857	0.249	35.5	0.0
	115.0	93.6	126.7	5.448	534.2	1182	16.000	0.225	31.4	0.0
	115.0	86.8	124.8	5.637	542.8	1116	14.965	0.199	27.3	0.0
	115.0	80.5	123.6	5.811	549.7	1045	13.807	0.172	23.3	0.0
	115.0	74.4	123.0	5.968	555.3	969	12.561	0.145	19.5	0.0
	115.0	68.7	122.8	6.111	559.5	887	11.250	0.119	15.8	0.0
	115.0	63.0	122.9	6.240	562.5	798	9.852	0.094	12.4	0.0
	115.0	57.4	123.3	6.344	562.8	703	8.414	0.070	9.3	0.0
	115.0	51.8	124.3	6.415	561.5	602	7.160	0.051	6.8	0.0
	115.0	48.2	127.9	6.471	562.0	493	6.235	0.037	4.9	0.0
	115.0	46.9	131.4	6.529	562.9	378	5.584	0.025	3.3	0.0
	115.0	45.5	133.7	6.592	565.8	256	5.328	0.016	2.1	0.0
	115.0	44.1	136.9	6.637	568.8	126	5.323	0.008	1.0	0.0

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Wiring Diagram

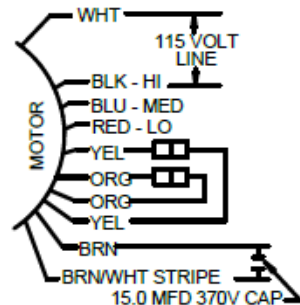


Dayton[®]**DIRECT DRIVE
BLOWER MOTOR**HP: 3/4
VOLTS: 115AMPS: 8.9
RPM: 1625 / 3SPD
DUTY: CONTSF: 1.00
KVA CODE:
ENCL: OAO

THERMALLY PROTECTED: AUTO

MFG. NO. PROT. CODE : 7A010 AVG.F.L
EFF.

MTR REF: K55HXRJN-2172

BAR CODEPart
No 3LU85BHPH: 1
HZ: 60
FR: 48YZ
INS CL: B
AMB: 40 °C
SFA:**Disconnect Power Before Making Any
Electrical Connections or Changes**TO REVERSE ROTATION
INTERCHANGE ORG
AND YEL LEADS**RU**[®]
E37403**SP**[®]
258501

US PAT 7709992

Mfd for Dayton Electric Mfg. Co., Lake Forest, IL 60045 USA

Made In China