

BALDOR® • RELIANCE®

Customer information packet

D5030RS-BV

30HP, 1750RPM, DC, 2512ATZ, DPG-FV,

Specifications

| | |
|---------------------------------|-------------------------|
| Enclosure | DP |
| Frame | SC2512ATZ |
| Frame Material | Steel |
| Output Power | 30.000 HP |
| Agency Approvals | CCSA US |
| Ambient Temperature | 40 °C |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Drip Cover | No Drip Cover |
| Feedback Device | NO FEEDBACK |
| Field Winding Type | STAB SHUNT |
| Frame Prefix | SC |
| Heater Indicator | No Heater |
| Lifting Lugs | Standard Lifting Lugs |
| Motor Standards | NEMA |
| Mounting Arrangement | F1 |
| Overall Length | 31.69 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Slinger Indicator | No Slinger |

Part detail

| | |
|---------------------|------------|
| Revision | - |
| Type | DC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | G6706C A |
| Layout | 609952-096 |
| Eff. date | 04-13-2015 |
| CD Diagram | 406770-001 |
| Poles | 00 |
| Leads | |
| Proprietary | False |
| Created date | 04-09-2015 |

Nameplate

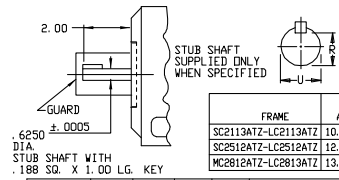
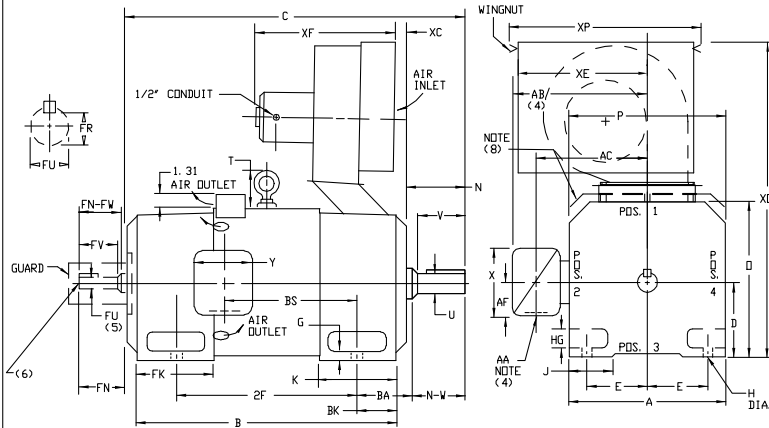
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| | | | | | |
|------------------------|--------------------------------|--------------------|------------|--------------|------|
| CAT.NO. | D5030RS-BV | SPEC NO. | T25T1342 | | |
| FR | SC 2512ATZ | HP | 30 | DUTY | CONT |
| ENCL. | DP | RPM | 1750/ 2300 | S.F. | 1.0 |
| ENCL MOD | FORCE VENT | VOLTS | 500 | INSUL | F |
| MAX SAFE SPEED | 4500 | AMPS | 51.00 | AMB. | 40 |
| | FIELD DATA | SER.NO. | | | |
| WINDING | STAB SHUNT | POWER CODE | C | | |
| VOLTS | 300 | D.E. BRG. | 60BC03J30X | | |
| MAX AMPS @ 25 C | 2.84 | O.D.E. BRG. | 50BC02J30X | | |
| HOT AMPS | 2.05/ 1.26 | MIN. AMB. | 0 | TYPE | TR |
| | BRUSH:419904051AD; AIR BAFFLED | | | | |

609952-096

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

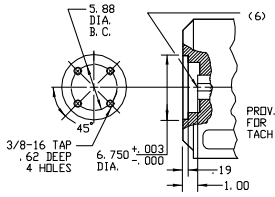
ENCLOSURE: DRIP-PROOF FULLY-GUARDED, SPLASHPROOF
 COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR
 AIR FILTERED-SPECIAL BAFFLE
 MOUNTING: FOOT
 METHOD OF DRIVE: COUPLED OR BELTED
 ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED
 FRAMES SC2113ATZ THRU C2813ATZ



DIMENSIONS ARE IN INCHES

| FRAME | XC | XE | XF | XD | XP |
|---------------------|------|-------|-------|-------|-------|
| SC2113ATZ-LC2113ATZ | 1.00 | 10.00 | 17.25 | 28.00 | 14.50 |
| SC2512ATZ-LC2512ATZ | 2.50 | 10.00 | 17.25 | 30.31 | 14.50 |
| MC2812ATZ-LC2813ATZ | 1.75 | 10.00 | 18.50 | 30.62 | 14.50 |

| FRAME | C | B | BS | 2F | DRIVE END SHAFT AND KEY | | | | | OPPOSITE DRIVE END SHAFT AND KEY(S) | | | | | WT. LBS. | | | | |
|-----------|-------|-------|-------|-------|-------------------------|------|-------|------|-------|-------------------------------------|-------|------|-------|--------|----------|-------|-------|------|-------|
| | | | | | N | N-W | UK(2) | V | RK(3) | SQ | LGTH. | FN | FN-FV | FUK(2) | | FV | FR(3) | SQ | LGTH. |
| SC2113ATZ | 28.38 | 22.50 | 1.38 | 18.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.391 | 500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | 375 | 2.25 | 345 |
| MC2113ATZ | 29.62 | 23.75 | 12.62 | 18.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.391 | 500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | 375 | 2.25 | 370 |
| LC2113ATZ | 31.25 | 25.38 | 14.25 | 18.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.391 | 500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | 375 | 2.25 | 400 |
| SC2512ATZ | 31.69 | 25.06 | 12.06 | 20.00 | 4.50 | 4.25 | 2.125 | 4.00 | 1.845 | 500 | 3.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | 500 | 2.50 | 535 |
| MC2512ATZ | 33.19 | 26.56 | 13.56 | 20.00 | 4.50 | 4.25 | 2.125 | 4.00 | 1.845 | 500 | 3.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | 500 | 2.50 | 570 |
| LC2512ATZ | 34.69 | 28.06 | 15.06 | 20.00 | 4.50 | 4.25 | 2.125 | 4.00 | 1.845 | 500 | 3.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | 500 | 2.50 | 610 |
| MC2812ATZ | 37.38 | 29.94 | 14.25 | 22.00 | 5.00 | 4.75 | 2.375 | 4.50 | 2.021 | 625 | 3.50 | 4.50 | 4.25 | 2.125 | 4.00 | 1.845 | 500 | 3.00 | 810 |
| LC2812ATZ | 39.62 | 32.19 | 16.50 | 22.00 | 5.00 | 4.75 | 2.375 | 4.50 | 2.021 | 625 | 3.50 | 4.50 | 4.25 | 2.125 | 4.00 | 1.845 | 500 | 3.00 | 885 |
| LC2813ATZ | 41.25 | 33.81 | 18.12 | 25.00 | 5.00 | 4.75 | 2.375 | 4.50 | 2.021 | 625 | 3.50 | 4.50 | 4.25 | 2.125 | 4.00 | 1.845 | 500 | 3.00 | 940 |



- (1) "B" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
 - (2) "U" AND "FU" VARY-----, ODD -.001.
 - (3) "B" AND "FR" VARY-----, ODD -.015
 - (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER TO BOX D/S. (STD. 609959-1, "X/P" 609959-2, MILL 609959-3)
 - (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
 - (6) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.
 - (7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DPP, DRIVE END, ADD .25 TO "C" DIA. FOR BRACKET COVER.
 - (8) FOR HORIZONTAL APPLICATIONS ONLY.
- TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, V-4, V-5, V-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED. BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4. MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY. BLOWER MOTOR

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

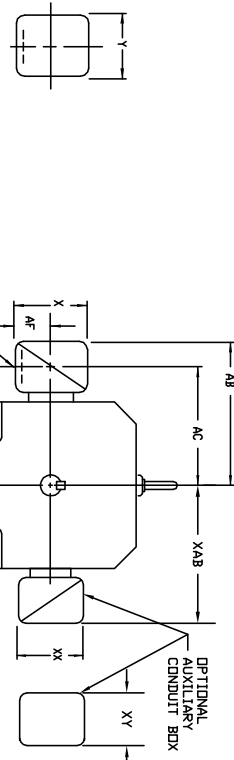
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| FILE: \RGG\00015\585 | | |
| MTL: - | | |

BALDOR
 DIMENSION DRAWING, SC2113ATZ - C2813ATZ, DPP, FOOT MTG.
 SH 1 of 1

609952-096

609959-001

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III
TERMINAL BOX DIMENSIONS
STANDARD SIZE AND ONE SIZE LARGER
FRAMES C2113ATZ THRU C2815ATZ



DIMENSIONS ARE IN INCHES

| FRAME SIZE | MAX. AMPS | STANDARD SIZE | | | | | | STEEL TERMINAL BOX DIMENSIONS | | | | | | ONE SIZE LARGER | | | | | | |
|--------------|-----------|---------------|-------|-------|------|-------|------|-------------------------------|---------------|-------|-------|------|-------|-----------------|------------|----|----|---|---|--|
| | | AK(1) | AB | AC | AF | X | Y | AK(1) | AB | AC | AF | X | Y | AK(1) | AB | AC | AF | X | Y | |
| C2113ATZ | 40 | 3/4 & 1" | 8.97 | 7.47 | 1.94 | 4.38 | 5.00 | 705028-1-R | 1-1/4 & 1-1/2 | 10.03 | 8.03 | 2.50 | 5.50 | 6.12 | 705029-1-R | | | | | |
| C2115ATZ | 96 | 1-1/4 & 1-1/2 | 10.03 | 8.03 | 2.50 | 5.50 | 6.12 | 705029-1-R | 2" & 2-1/2 | 11.16 | 8.41 | 3.19 | 7.00 | 7.62 | 705030-1-R | | | | | |
| C2115ATZ (C) | 208 | 2" & 2-1/2 | 11.16 | 8.41 | 3.19 | 7.00 | 7.62 | 705030-1-R | 2" & 2-1/2 | 11.16 | 8.41 | 3.19 | 7.00 | 7.62 | 705030-1-R | | | | | |
| C2516ATZ | 40 | 3/4 & 1" | 10.03 | 8.53 | 1.94 | 4.38 | 5.00 | 705029-1-R | 1-1/4 & 1-1/2 | 11.09 | 9.09 | 2.50 | 5.50 | 6.12 | 705029-1-R | | | | | |
| C2516ATZ (C) | 96 | 1-1/4 & 1-1/2 | 11.09 | 9.09 | 2.50 | 5.50 | 6.12 | 705029-1-R | 2" & 2-1/2 | 12.22 | 9.47 | 3.19 | 7.00 | 7.62 | 705030-1-R | | | | | |
| C2816ATZ | 208 | 2" & 2-1/2 | 12.22 | 9.47 | 3.19 | 7.00 | 7.62 | 705030-1-R | 2" & 2-1/2 | 12.22 | 9.47 | 3.19 | 7.00 | 7.62 | 705030-1-R | | | | | |
| C2816ATZ (C) | 400 | 2" | 14.03 | 10.53 | 4.25 | 8.44 | 7.25 | 7487-4-R | 3" | 14.47 | 11.22 | 4.25 | 8.44 | 7.25 | 7487-4-R | | | | | |
| C2815ATZ | 185 | 3" | 14.47 | 11.22 | 4.25 | 8.44 | 7.25 | 7487-4-R | 3" | 15.91 | 11.84 | 5.38 | 10.56 | 9.00 | 706508-3-R | | | | | |
| C2815ATZ (C) | 259 | 4" | 15.91 | 11.84 | 5.38 | 10.56 | 9.00 | 706508-3-R | 5" (4) | 18.72 | 13.47 | 7.00 | 12.75 | 15.00 | 706509-1-C | | | | | |

| FRAME SIZE | MAX. AMPS | STANDARD SIZE | | | | | | CAST IRON TERMINAL BOX DIMENSIONS | | | | | | ONE SIZE LARGER | | | | | | |
|--------------|-----------|---------------|-------|-------|------|------|-------|-----------------------------------|--------|-------|-------|------|-------|-----------------|------------|----|----|---|---|--|
| | | AK(3) | AB | AC | AF | X | Y | AK(3) | AB | AC | AF | X | Y | AK(3) | AB | AC | AF | X | Y | |
| C2113ATZ | 18 | 3/4 | 10.03 | 8.03 | 2.50 | 5.00 | 5.75 | 705028-2-S | 1" | 10.03 | 8.03 | 2.50 | 5.00 | 5.75 | 705028-2-T | | | | | |
| C2113ATZ (C) | 40 | 1" | 10.03 | 8.03 | 2.50 | 5.00 | 5.75 | 705028-2-T | 1-1/2 | 10.97 | 8.53 | 3.00 | 6.00 | 7.00 | 705029-2-S | | | | | |
| C2115ATZ | 96 | 1-1/2 | 10.97 | 8.53 | 3.00 | 6.00 | 7.00 | 705029-2-S | 2" | 10.97 | 8.53 | 3.00 | 6.00 | 7.00 | 705029-2-S | | | | | |
| C2115ATZ (C) | 208 | 2" | 10.97 | 8.53 | 3.00 | 6.00 | 7.00 | 705029-2-S | 2-1/2 | 12.66 | 8.91 | 3.62 | 7.88 | 9.25 | 705030-2-R | | | | | |
| C2516ATZ | 18 | 3/4 | 11.09 | 9.09 | 2.50 | 5.00 | 5.75 | 705028-2-S | 1" | 11.09 | 9.09 | 2.50 | 5.00 | 5.75 | 705028-2-T | | | | | |
| C2516ATZ (C) | 96 | 1-1/2 | 11.09 | 9.09 | 2.50 | 5.00 | 5.75 | 705028-2-T | 1-1/2 | 12.03 | 9.59 | 3.00 | 6.00 | 7.00 | 705029-2-R | | | | | |
| C2515ATZ | 208 | 2" | 12.03 | 9.59 | 3.00 | 6.00 | 7.00 | 705029-2-S | 2" | 12.03 | 9.59 | 3.00 | 6.00 | 7.00 | 705029-2-S | | | | | |
| C2813ATZ | 185 | 3" | 12.78 | 10.34 | 3.00 | 6.00 | 7.00 | 75460-T | 3" | 13.72 | 9.97 | 3.62 | 7.88 | 9.25 | 705030-2-S | | | | | |
| C2813ATZ (C) | 259 | 4" | 14.47 | 10.72 | 3.62 | 7.88 | 9.25 | 76700-4R | 4" | 14.47 | 10.72 | 3.62 | 7.88 | 9.25 | 76700-4R | | | | | |
| C2815ATZ | 185 | 3" | 15.78 | 11.59 | 4.12 | 9.50 | 10.50 | 76700-4R | 5" (4) | 15.78 | 11.59 | 4.12 | 9.50 | 10.50 | 76700-4R | | | | | |
| C2815ATZ (C) | 259 | 4" | 15.78 | 11.59 | 4.12 | 9.50 | 10.50 | 76700-4R | 5" (4) | 18.59 | 13.34 | 7.00 | 12.75 | 15.00 | 76870-S | | | | | |

| FRAME SIZE | AMPS | STANDARD SIZE | | | | | | OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (SEE TYPE BOX) | | | | | |
|------------|------|---------------|-------|------|-------|-----|-------|--|----|----|---|---|--|
| | | AB | AC | AF | X | AA | Y | AB | AC | AF | X | Y | |
| C210 | 100 | 10.71 | 8.98 | 2.72 | 7.48 | --- | 7.48 | 706310-25-A | | | | | |
| | 200 | 11.66 | 9.25 | 3.35 | 8.82 | --- | 8.82 | 706310-25-B | | | | | |
| | 100 | 11.30 | 9.57 | 2.72 | 7.48 | --- | 7.48 | 706310-25-A | | | | | |
| C250 | 200 | 11.85 | 9.84 | 3.35 | 8.82 | --- | 8.82 | 706310-25-B | | | | | |
| | 400 | 17.48 | 12.75 | 6.20 | 14.39 | --- | 14.39 | 706310-63-B & 706310-63G | | | | | |
| | 800 | 17.48 | 12.75 | 6.20 | 14.39 | --- | 14.39 | 706310-63-B & 706310-63G | | | | | |
| | 200 | 12.60 | 10.59 | 3.76 | 8.82 | --- | 8.82 | 706310-25-B | | | | | |
| | 400 | 18.27 | 13.54 | 6.20 | 14.39 | --- | 14.39 | 706310-63-B & 706310-63G | | | | | |
| | 800 | 18.27 | 13.54 | 6.20 | 14.39 | --- | 14.39 | 706310-63-B & 706310-63G | | | | | |
| C280 | 1600 | 18.27 | 13.54 | 7.68 | 15.35 | --- | 15.35 | 706310-63-C | | | | | |

- (1) MAX. CONDUIT
- (2) FRAME TERMINAL BOX FOR C2113ATZ AND C2512ATZ
- (3) FRAME TERMINAL BOX WITH MODULE KNOWNDON
- (4) TERMINAL BOX 76870-S AND 76870-9R EXTENDS BELOW MOTOR FEET

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

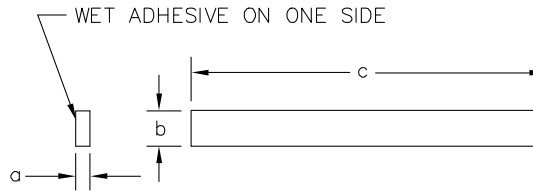
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| REV. LTR: A | | |
| FILE: \RGG\00021\153 | | REVISED: 03: 09: 09 09/06/2013 |
| MTL: - | | BY: RGGWT |



DIMENSION SHEET
SH 1 of 1

609959-001

065564-004



| SYM | MAKE FROM | a | b | c | REMARKS |
|-----|------------|-----|-----|-----------------|------------------------------|
| | 065564-004 | | | | |
| A | X | 1/8 | 5/8 | 24* | TERMBOX & CVR 180AT-250AT |
| B | X | 1/8 | 5/8 | 37 1/2* | TERMBOX & CVR 280AT-320AT |
| C | Y | 1/4 | 5/8 | 44 1/2 Δ | FILTER TO HOUSING GASKET |
| D | X | 1/8 | 5/8 | 170" | TEAO HEAT EXCH. |
| E | Y | 1/4 | 5/8 | 72" Δ | TERMBOX & CVR |

| SYM | MAT'L SPEC | a | b | c |
|-----|------------|-----|-----|--------------------------------------|
| X | 46024-XV | 1/8 | 5/8 | * 50' ROLL; WET ADHESIVE ON ONE SIDE |
| Y | 46024-XV | 1/4 | 5/8 | * 50' ROLL; WET ADHESIVE ON ONE SIDE |

Δ RELIANCE WILL CUT AND MOUNT ON FILTER HOUSING PER ASSEMBLY DRAWING 603989-2.

* PROD. NOTE: WHEN ORDERING THRU PURCHASING ORDER AS 50 FT. ROLLS, WET ADHESIVE ON ONE SIDE. RELIANCE WILL CUT AND MOUNT ON COVER. PER INSTRUCTIONS ON COVER DRAWINGS.

065564-004

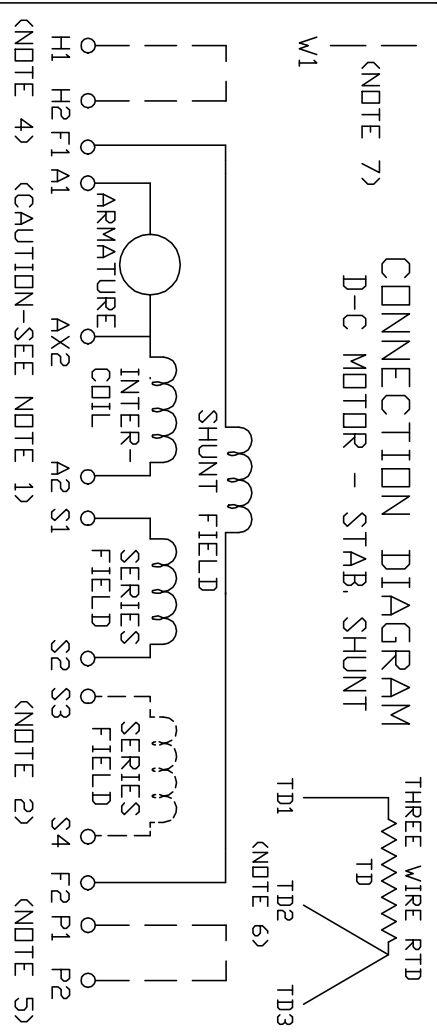
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

| | | |
|--|------------------------------|------------------|
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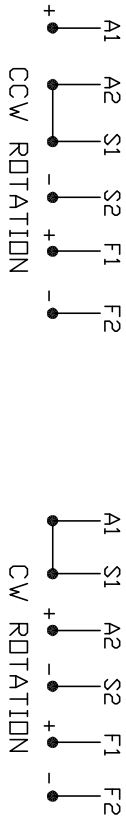
BALDOR
GASKET,STRIP,CLOSED CELL NEOPRENE
SH 1 of 1

406770-001

406770-001



ARMATURE AND FIELD EXTERNAL CONNECTIONS
WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS



ROTATION FACING COMMUTATOR END

1. CAUTION — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
 2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE.
 3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
 4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
 5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
 6. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3
 7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
 8. WARNING — MOTOR MUST BE GROUNDED TO PREVENT SERIOUS INJURIES TO PERSONNEL. GROUND THE MOTOR PER IEC, NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL ELECTRICAL CODES. A TAPPED HOLE IS PROVIDED IN THE CONDUIT BOX, ON THE FOOT, FRAME BRACE OR OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.
- CUSTOMER _____ ORDER NO. _____ S.D. NO. _____
 CUSTOMER RELIANCE

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8

REV. LTR: A

VERSION: 01

TDR: 000000970330

FILE: \RSN\00026\422

REVISED: 10:19:12 03/11/2016

BY: RAGTBM

MTL: -



BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1