



MILLINGTON, TN

LITTLE ROCK, AR

Job Information

Job #: 138368

Date: November 5, 2018

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name:

Motor#:

Name Plate Information

Manufacturer: RELIANCE

Enclosure : Open Drop Proof (ODP)

Serial#: 1UK8828595T1-DG

Model#:

Service Factor:

Frame: 503ADZ

Horsepower/kW:

Rated RPM: 400/2400

Armature

Volts 240

Amps 5463

Fields

Volts 240

Amps

Winding Inspection

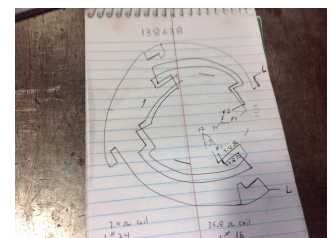
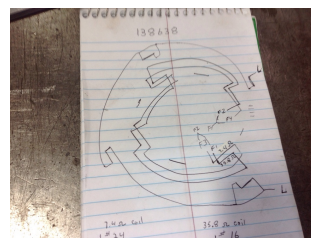
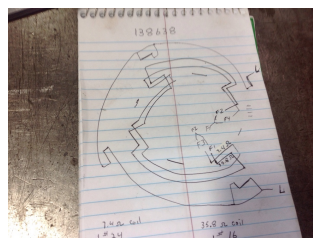
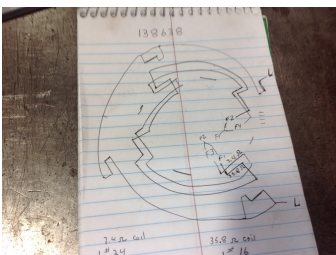
Identify winding disassembly & winding assembly.

Armature diagram

IP diagram

Flds diagram

Comm diagram

**WEST TENNESSEE**

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MILLINGTON, TN

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Winding Inspection (Continued)

DC Drop Test

Megohmmeter reading to ground @ 500 V DC

Armature

Shunt

Interpole

Series

Nameplate field volts:

Nameplate amps:

Num coils:

Resistance = Field votes:

/ Field amps:

= 0

Total field resistance:

@

F/C correct to 25 degrees C

Test tolerances: For a DC drop Test +/- 5% from average; for an AC drop test +/- 10% from average.

Applied Voltage 1:

DC/# of Coils 1:

= Target Voltage/coil 1: 0

Applied Voltage 2:

DC/# of Coils 2:

= Target Voltage/coil 2: 0

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DC Drop Test (Continued)

Match mark all coils clockwise beginning at the leads.

Voltage Applied

Shunt DC Voltage:

Shunt AC Voltage:

Voltage Measured

| Coil # | DC | AC |
|---------|----|----|
| Coil 1 | | |
| Coil 2 | | |
| Coil 3 | | |
| Coil 4 | | |
| Coil 5 | | |
| Coil 6 | | |
| Coil 7 | | |
| Coil 8 | | |
| AVERAGE | 0 | 0 |
| +5% | 0 | 0 |
| -5% | 0 | 0 |

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DC Drop Test (Continued)

Match mark all coils clockwise beginning at the leads.

Voltage Applied

A. Interpoles DC Voltage:

A. Interpoles AC Voltage:

Voltage Measured

| Coil # | DC | AC |
|---------|----|----|
| Coil 1 | | |
| Coil 2 | | |
| Coil 3 | | |
| Coil 4 | | |
| Coil 5 | | |
| Coil 6 | | |
| Coil 7 | | |
| Coil 8 | | |
| AVERAGE | 0 | 0 |
| +5% | 0 | 0 |
| -5% | 0 | 0 |

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DC Drop Test (Continued)

Match mark all coils clockwise beginning at the leads.

Voltage Applied

B. Interpoles DC Voltage:

B. Interpoles AC Voltage:

Voltage Measured

| Coil # | DC | AC |
|----------------|----------|--------|
| Coil 1 | | |
| Coil 2 | | |
| Coil 3 | | |
| Coil 4 | | |
| Coil 5 | | |
| Coil 6 | | |
| Coil 7 | | |
| Coil 8 | | |
| AVERAGE | 14288.54 | 104.68 |
| +5% | 1.05 | 0 |
| -5% | 0.95 | 0 |

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Conclusion

Service Tech name:

Service Tech signature:

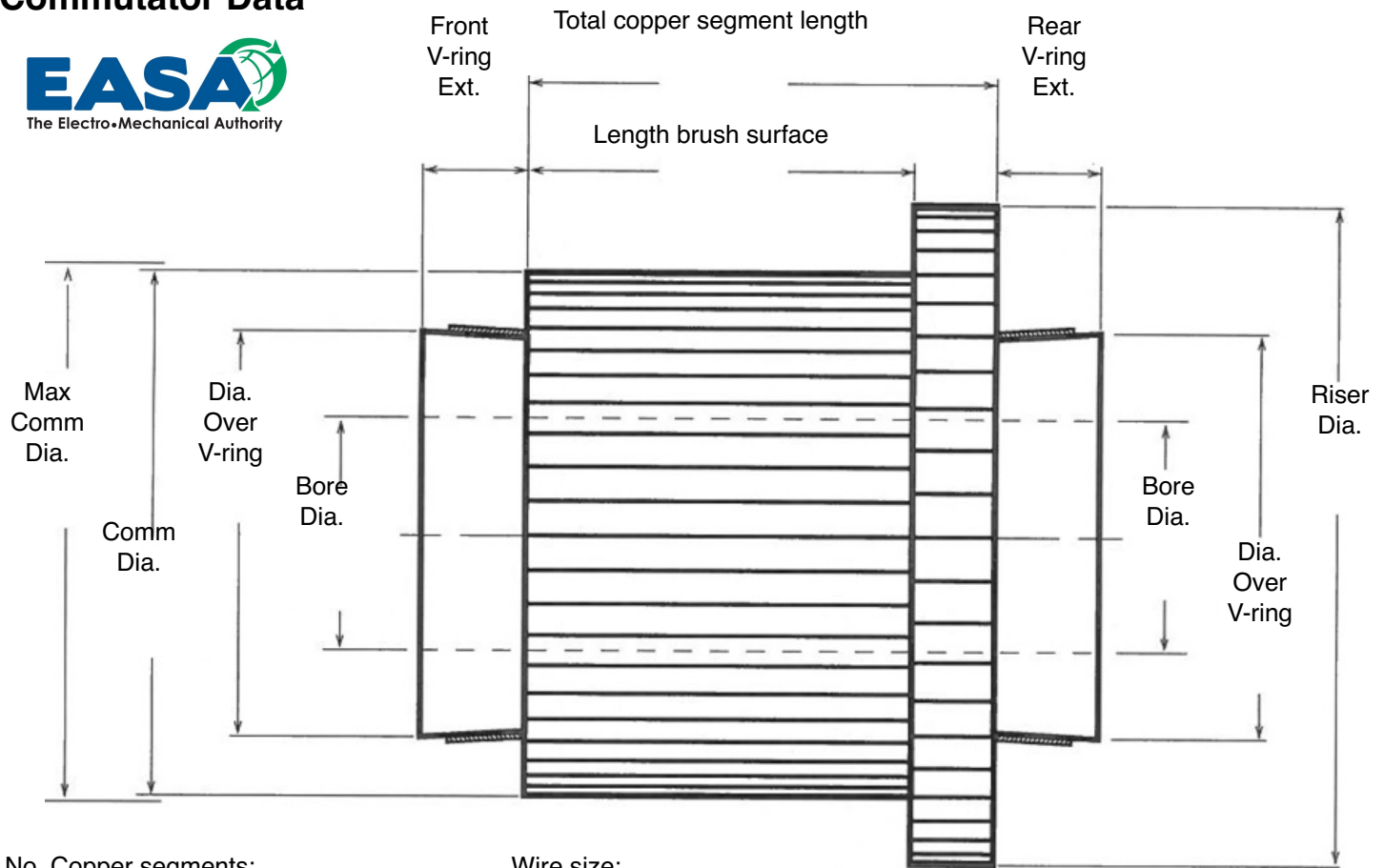
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Commutator Data



Indicate Riser Type

No. Copper segments:

Wire size:

Mica segment thickness:

Wires/riser slot:

Equalizer size:

Equalizer/riser slot:

Equalizer seq. on comm.:

Commutator Type

☐ Nut v-ring ☐ Bolt v-ring ☐ Glassband

☐ Riveted*

☐ Molded*

☐ Other*

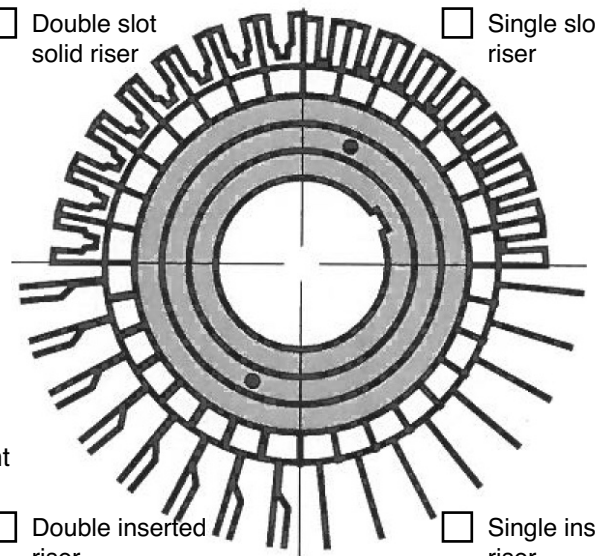
Shaft Diameter

Keyway alignment with center line of: ☐ Mica ☐ Copper segment

Keyway size:

*If molded, riveted or other micrometer measurement of shaft diameter corresponding to the commutator bore diameter is required.

☐ Double slot solid riser ☐ Single slot solid riser



☐ Double inserted riser ☐ Single inserted riser

Inserted riser thickness:

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DC Machine Data Sheet

Armature Coil Data

Slots: Turns per coil: Coil per slot:

Wire size: Wires in mult.: Wire type: Wire weight: Lbs.

Bars: Slot span 1 to: Comm span 1 to:

Winding Type

☐ Shunt

☐ Series

☐ Compound

No. of equalizers: Span 1 to: Wire size:

Knuckle: ☐ Standard ☐ Double

Wound: ☐ Flat ☐ Edge

Coil: ☐ Left hand ☐ Right hand

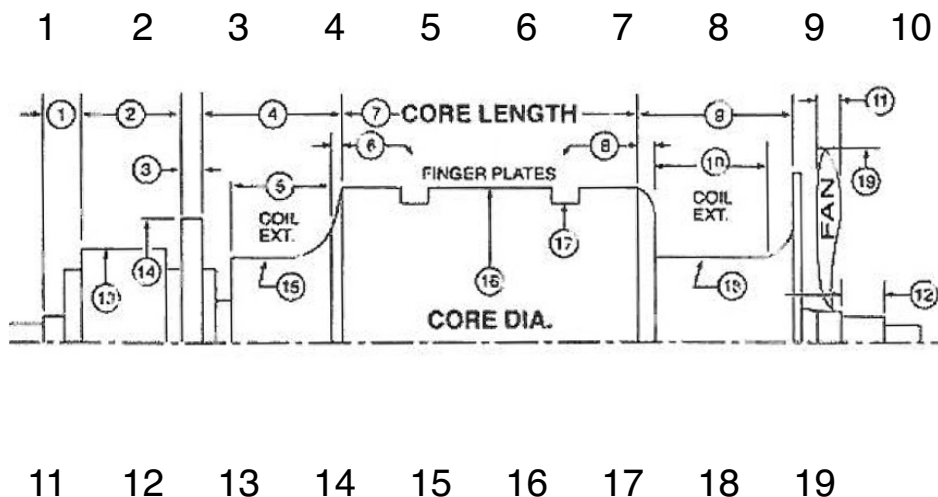
Compensating Winding

Wire size: Turns per slot:

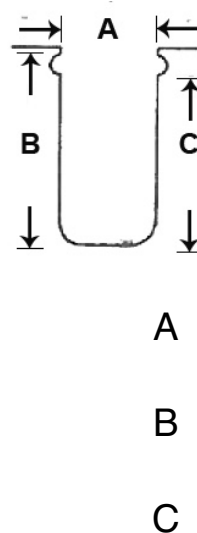
Interpoles: Yes

☐ Compensating or Pole Face Winding

☐ Permanent Magnet



Slot Dimensions



Insul. class:

Temp. Rise:

Duty:

Wave Winding

Leads from slot 1 to bar:

Leads from

Slot to bar:

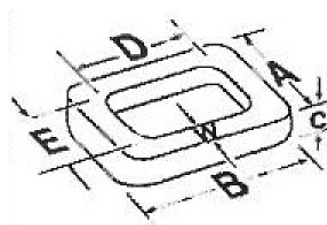
Field Coil Dimensions

TYPE A B C D E W

Shunt

Series

Interpoles



Manufacturer's Part Numbers

Lap Winding

Leads from slot 1 to bar:

Leads from

Slot to bar:

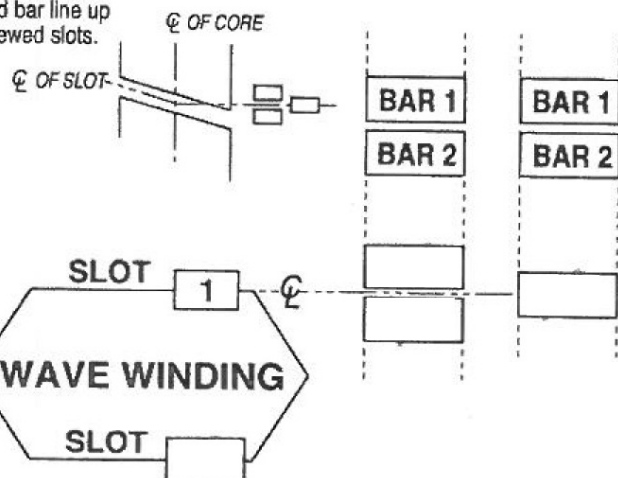
DC Machine Data Sheet (Continued)

Field Coil Winding Data

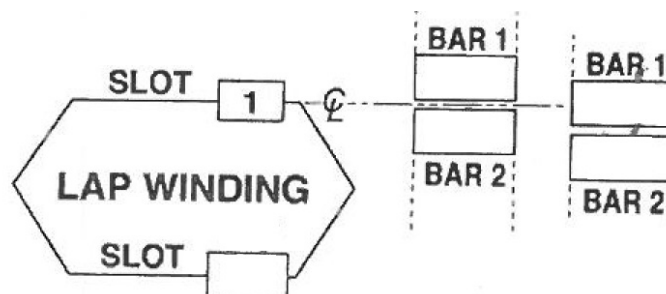
| Type | No. Coils | No. Cir. | Turns Per Coil | Mult. | Wire Size & Type | Lbs. Per Coil | 25 Ohm Per Coil DC |
|--------|-----------|----------|----------------|-------|------------------|---------------|--------------------|
| Shunt | 8 | 1 | 493 | 1 | 24 | 2.75 | 35.8 |
| | | | 798 | 1 | 16 | 16.5 | 7.4 |
| Series | 4 | 1 | 2 | 1 | 114228 | 0.25 | |

Interpoles

Slot and bar line up with skewed slots.



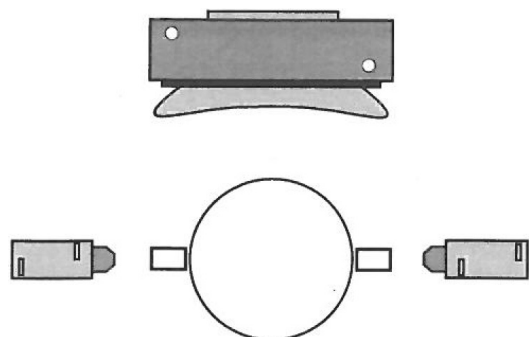
Slots and bars are numbered 1-2-3 etc... in CCW direction facing the commutator.



Remarks

As-Received Connection Form--2-,4-,and 6-pole DC Machines

(Draw and number leads and jumpers as received)



2-Pole Template

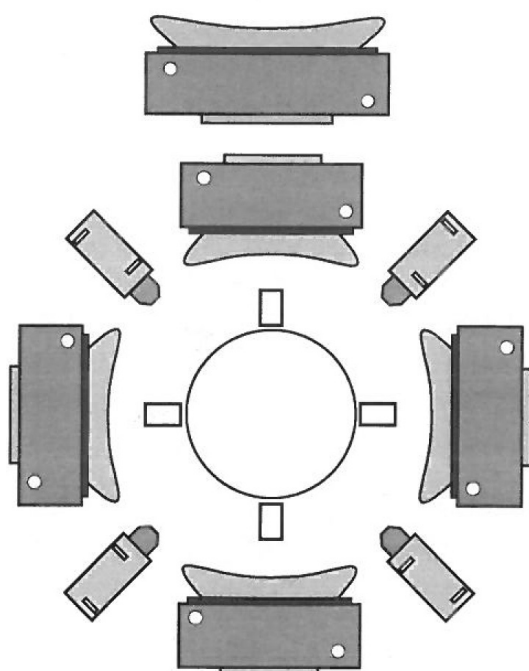
Quantity
in series

Quantity
in parallel

Number of poles

Number of interpoles

Number of series fields



4-Pole Template

Quantity
in series

Quantity
in parallel

Number of poles

4

4

Number of interpoles

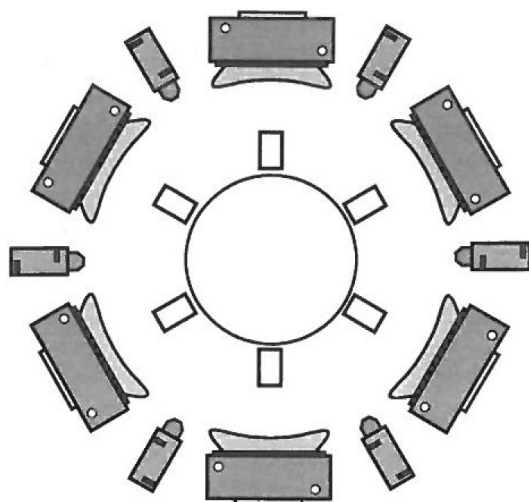
4

4

Number of series fields

4

4



6-Pole Template

Quantity
in series

Quantity
in parallel

Number of poles

Number of interpoles

Number of series fields

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