Equipment Information

General Notes

- Nameplate - White background with black letters
  - ‣ Minimum 1/4″ high etched letters
  - ‣ Attach with silicone and stainless steel machine screws, washer, and nuts on inside

Tag	Inscription	Color
ON	ON	Green
OFF	OFF	Red
OPEN	OPEN	Green
CLOSED	CLOSED	Red
LOW	LOW	Amber
FAIL	FAIL	Amber
HIGH	HIGH	Amber
AUTO	AUTO	White
MANUAL	MANUAL	Yellow
LOCAL	LOCAL	White
REMOTE	REMOTE	Yellow
FORWARD	FORWARD	Red
REVERSE	REVERSE	Blue

Tag Function	Inscription	Color
HOA	HAND	Black
	OFF	Black
	AUTO	Black

- Wire labels - White background with black letters
  - ‣ Permanent letters on tags, write on tags not permitted

RVSS

Spec Section 16421

- Square D (Equivalent to Cutler-Hammer Type S801)
  - ‣ Something like ATS480D22Y (used in combo with 8536 starter?)
  - ‣ Keypad: VW3A1113
  - ‣ Keypad Mounting Kit: VW3A1114
  - ‣ Keypad Cable: VW3A1104R30
- Soft start-stop
- SCR based power section
  - ‣ 6 back-to-back SCRs with peak inverse voltage rating of 1500 volts PIV
  - ‣ NO TRIACS OR SCR/DIODE COMBOS
- Logic board and paralleling bypass contactor

- Electronic overload relay
- Keypad adjustable overload protection

Power Meter (Motor Management Relay)

Spec Section 16421-2.01W

- For now, go with spec suggestion: <u>Socomec 48250501</u>

Control Systems Hardware

Spec Section 17441

- Outdoor panels - NEMA 4X
  - ‣ Hoffman or approved equal → let's do Saginaw
  - ‣ Min 24″ H x 20″ W x 10″ D
  - ‣ Rubber Gasketed Continuous Hinge Door?
- Heater for condensation control
  - ‣ 40-80° fahrenheit
  - ‣ N.C. thermostat control
  - ‣ dedicated circuit breaker protection
  - ‣ 120VAC operating voltage
- Lighting
  - ‣ 1 door controlled if enclosure >12ft^3
- **Motor protection relay by others**
- Circuit Breakers
  - ‣ Typical Weidmuller circuit breakers should be fine
- Relays
  - ‣ General Relays - Harmony RXM Series

Voltage	DPDT	3PDT	4PDT
24VDC	<u>RXM2AB2BD</u>	<u>RXM3AB2BD</u>	<u>RXM4AB2BD</u>
120VAC	<u>RXM2AB2F7</u>	<u>RXM3AB2F7</u>	<u>RXM4AB2F7</u>

  - ‣ Timing Relay - 9050 JCK Plug-in Timers
    - – 0-60 second adjustable time delay

Voltage	On-Delay	Off-Delay
120VAC	<u>9050JCK13V20</u>	<u>9050JCK23V20</u>

  - ‣ Pilot Lights

Color	Model
Green	<u>9001SKT38LGG31</u>
Red	<u>9001SKT38LRR31</u>
Amber	<u>9001SKT38LYA31</u>

  - ‣ Pushbutton

Component	Model
Pushbutton Head	9001SKR1B
NO Contact	9001KA2
NC Contact	9001KA3

- ‣ Selector Switch
  - – 9001SKS43BH2
- ‣ Elapsed Time Meter
  - – TRUMETER 722-001 with gasket 5003-010
- ‣ Disconnect
  - – Square D to spec with flange mounted disconnect switch
- ‣ Fuses
  - – Typical Mersen fuses

Spare Parts

Section 17441-3.02

- 5 spare control relays for each type used
- 5 fuses of each type and rating