
Specifications

General Information

Motor Type

3-phase, AC (not suitable for DC motors)
Fixed speed (line driven)
Variable speed (inverter driven)
Motor current load variation must be less than 15% during 6 sec data acquisition period
Not for use with soft-starter systems unless they are automatically bypassed immediately after motor start-up and during subsequent use

Operation Type

Continuous

Environmental

Operating Temperature

32 – 104° F (0 – 40° C)

Humidity

Up to 90% RH, non-condensing

Inputs

Power Input Required

Use UL listed fuse with proper voltage rating:
100-240 Vac (-15%, +10%), 47 – 64 Hz, 19 VA, 200 mA
or
120-300 Vdc, 19 VA, 200 mA

Measurement Voltage Inputs

NOTE: Voltage transformers must meet local standards and regulations. For North America, current and voltage transformers must be certified by an OSHA appointed NRTL to appropriate product safety standards such as UL or CSA.

Low Voltage AnomAlert Models (≤480 Vac)

Can tap directly off voltage lines to motor

High Voltage AnomAlert Models (>480Vac)

Three Cat II Voltage Transformers (supplied by customer): 0.3% to 0.6% accuracy; 100 V, 110 V, or 120 V secondary voltages

Measurement Current Inputs

NOTE: Current transformers must meet local standards and regulations. For North America, current and voltage transformers must be certified by an OSHA appointed NRTL to appropriate product safety standards such as UL or CSA.

Fixed Speed (Line Driven) AnomAlert Models

Three 250 Vac, Cat II Current Transformers (supplied by customer): 0.3% to 0.6% accuracy, with either 5A or 1A secondary outputs depending on AnomAlert model.

*Variable Speed
(Inverter Driven)
AnomAlert
Models*

3 Hall-effect Current Sensors (supplied by customer): selected based on the power of the motor to be monitored; secondaries to be 50-400 mA output, 30 Vac SELV.

Note: Hall-effect Current Sensors need external power sources, generally installed in the motor control panel, too.

Outputs

Alarms

*4 Alarm
Parameters:*

Line Change (unexpected change in incoming power)

Load Change (unexpected change in process)

Examine 1: plan maintenance

Examine 2: perform maintenance

Warnings

Any measured or calculated parameter outside its expected range based on internal data base and learned mode.

Relay

One assignable relay output, user programmable; NC/NO contacts

Communications

RS422/485

RS232 (with additional appropriate converter)

Ethernet (with additional appropriate converter)

Physical

Weight

Line: 2.58 lb (1170 g)

Inverter: 2.16 lb (980 g)

Dimensions WxHxL

3.78 in x 3.78 in x 5.51 in

(96 mm x 96 mm x 140 mm)

Mounting

Front Panel Mounting (indoor)

Protection Class

Front Panel: IP 40

Whole Unit: IP 20

Indicators

6 LEDs and LCD Readout

Keypad

6 tactile membrane keys

Compliance & Certifications

EMC:

Europe:

EMC Directive 2004/108/EC

EN 61000-6-2 Immunity for Industrial Environments

EN 61000-6-4 Emissions for Industrial Environments

Australia/New Zealand:

C-tick

IEC 61000-6-2 Immunity for Industrial Environments

IEC 61000-6-4 Emissions for Industrial Environments

Electrical Safety:

Europe:

Electrical Safety Directive 2006/95/EC

EN 61010-1 Safety
Requirements for Electrical
Equipment

North America:

UL Listed, Canada and US

UL 61010-1 Safety
Requirements for Electrical
Equipment

Australia/New Zealand:

C-Tick

IEC 61010-1 Safety
Requirements for Electrical
Equipment

Ordering Information

Order one AnomAlert per motor to be monitored. Each AnomAlert includes the AnomAlert Software on CD. Additionally, the CD includes the AnomAlert Manual, AnomAlert Software Manual and Quick Install Guides.

The CTs, PTs, and CSs are customer supplied. Refer to Measurement Inputs section of Specifications Section above.

AnomAlert Motor Anomaly Detector

390100 – AXX – BXX – CXX – DXX

A: Motor Voltage

- 01** Low (≤ 480 Vac)
- 02** Medium/High (> 480 Vac)

B: Motor Speed Type

- 01** Fixed (line driven)
- 02** Variable (inverter driven)

C: Motor Amperage (or CT secondary output)

For use with fixed speed only (B=01)

- 01** 1 A (CT secondary)
- 02** 1 - 5 A (CT secondary)

For variable speed only (B=02)

- 03** 5 - 100 A
- 04** 100 - 500 A
- 05** 500 - 1000 A
- 06** 1000 - 2000 A

D: Language

- 01** English

Converters

287127-01

RS 232/485 to RS 422 converter, with power supply adapter. Kit includes sample cable for connection to AnomAlert, and sample cable for interconnection between converter and PC (1 required for each PC to which daisy-chained AnomAlerts will be connected).

287128-01

Moxa* Nport* DE-311 RS422 to TCP/IP Ethernet converter with null modem mini adapter. Kit includes sample cable for connection to AnomAlert and a sample cross-cable for Ethernet connection.

AnomAlert Manuals

Are included in electronic format on AnomAlert Software disk that comes with each AnomAlert. Can be ordered as hardcopies using the following part numbers.

286868-01 Software Manual
286869-01 Users Manual

AnomAlert Quick Install Guides

Are included in electronic format on AnomAlert Software disk that comes with each AnomAlert. Can be ordered as hardcopies using the following part numbers.

286870-01 Low Voltage, Line
286871-01 Low Voltage Inverter
286872-01 Med/High Voltage, Line Model
286873-01 Med/High Voltage, Inverter Model
286874-01 RS485-RS422
286875-01 TCP/IP
286876-01 Software TCP/IP

AnomAlert Software

Comes with each AnomAlert unit. Can be ordered separately using the following part number.

390120-01 AnomAlert Software

Graphs and Figures

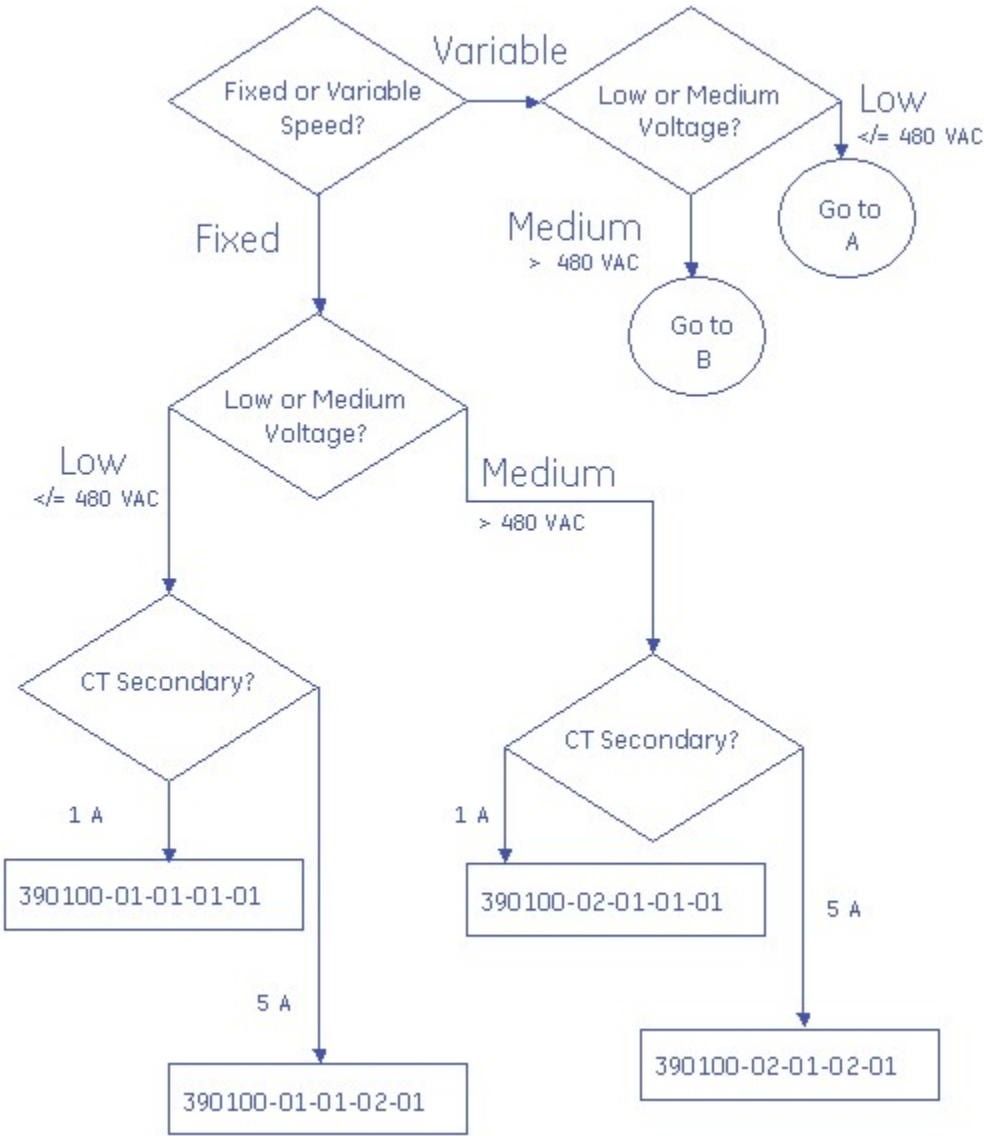


Figure 1: Model Number Selection: Fixed Speed

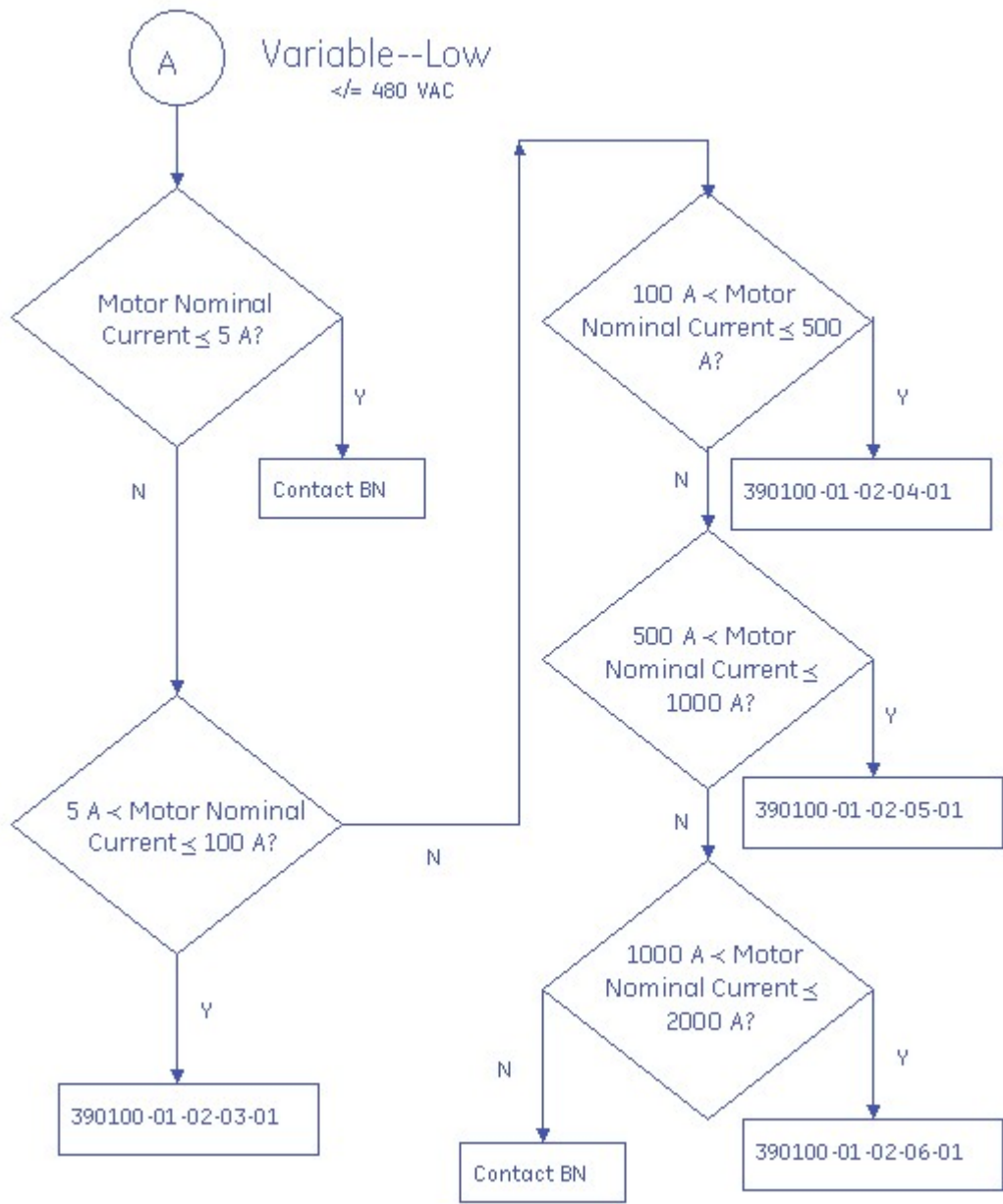


Figure 2: Model Number Selection: Variable Speed, Low Voltage

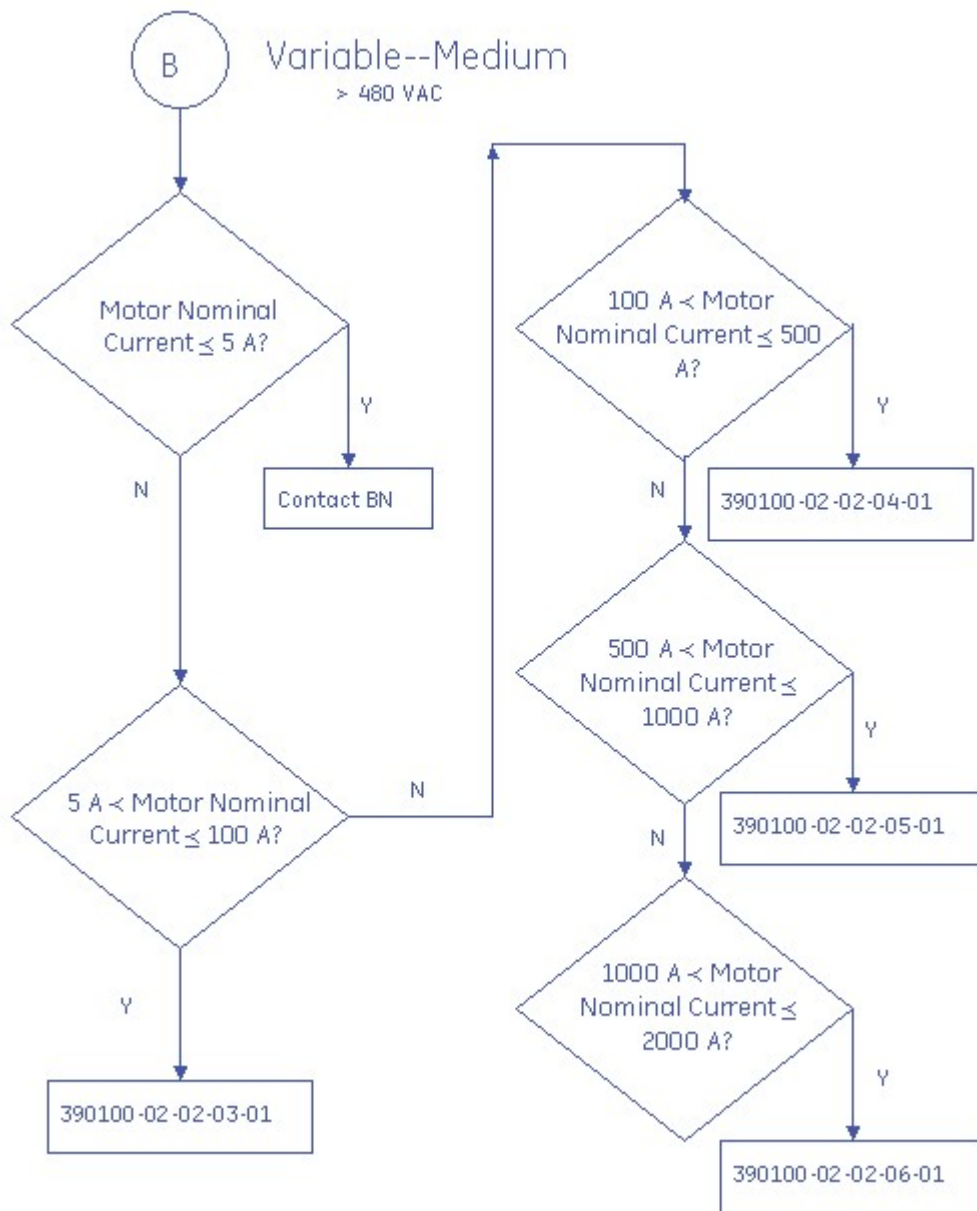


Figure 3: Model Number Selection: Variable Speed, Medium Voltage

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AnomAlert
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1631 Bently Parkway South, Minden, Nevada USA 89423
Phone: 775.782.3611 Fax: 775.215.2873
www.ge-energy.com/bently