Engineering Specifications

Multi Circuit Meter

A. The Multi Circuit Meter shall consist of digital electronic circuitry.
B. The Multi Circuit Meter shall accept 24 standard 5 Amp CT inputs.
C. The Multi Circuit Meter shall monitor 8 3-phase circuits or 6 3-phase plus neutral circuits.
D. The Multi Circuit Meter shall have a variable update rate of 1.6 seconds for all measured variables (excluding voltages).
E. The Multi Circuit Meter shall have a variable update rate of 200ms for voltages.
F. The Multi Circuit Meter's accuracy shall be +/- 1% over a temperature range of 0-60° C.
G. The Multi Circuit Meter shall require no annual recalibration by users in the field.
H. The Multi Circuit Meter shall offer user-selectable 2 or 4 wire RS485 connection.
I. The Multi Circuit Meter shall offer user-selectable addressing from 1-247.
J. The Multi Circuit Meter shall offer user-selectable baud rate of 2400, 4800, 9600 or 19200.
K. The Multi Circuit Meter shall offer user-selectable parity of None, Odd or Even.
L. The Multi Circuit Meter shall meet UL and cUL specifications as listed in UL508.
M. The Multi Circuit Meter shall provide a configurable warning alarm for all branch circuits monitored.
N. The Multi Circuit Meter shall provide a configurable full-alarm for all branch circuits monitored.
O. The Multi Circuit Meter shall communicate via Modbus RTU.
P. The information and capabilities provided by the Multi Circuit Meter shall include the following:
    a. Current, per phase & three-phase total
    b. Voltage, per phase & three-phase total, phase-to-phase & phase-neutral
    c. Real Power (kW), per phase & three-phase total
    d. Reactive Power (kVAR), three phase total
    e. Apparent Power (kVA), three phase total
    f. Power Factor, per-phase & three-phase total
    g. Real Energy (kWh), three phase total
    h. Frequency (measured from phase A)
    i. Over Voltage alarm
    j. Under Voltage alarm
    k. Over Current alarm
    l. Under Current alarm
    m. Over kVA alarm
    n. Under kVA alarm
    o. Phase loss A
    p. Phase loss B
    q. Phase loss C
Q. The Multi Circuit Meter shall be the H8238 Series supplied by Veris Industries.