RECEIVED
NOV 01 2018
1736 E. SUNSHINE ST. SUITE 417
SPRINGFIELD, MO 65804

Order Plans @ www.LBLine.com

EC1000

9"x 8.5"

NOTE:
PLUG THE ETHERNET CABLE INTO THE LEFT PLUG ON THE EC-1000

CAT5E

TO CUSTOMER LAN

ORANGE
ORANGE/WHITE
GREEN

600V RATED WIRE

POWER FOR THE CONTROLLER HAS BEEN SHARED WITH THE A PHASE OF THE REFERENCE VOLTAGE. IN THE EVENT THE SITE SERVICE IS GREATER THAN 120V A SEPARATE 120V 15-20 AMP SINGLE POLE BREAKER WILL BE NEEDED TO PROVIDE POWER TO THE CONTROLLER.

FOR ANY SITES WITH SINGLE PHASE SERVICE TERMINAL V3/C WILL NOT HAVE A WIRE CONNECTED. ALL OTHER CONNECTIONS WILL REMAIN THE SAME.

TO GROUND LUG

WIRING ENTERING THE CONTROLLER CABINET THAT IS USED FOR POWER AND/OR METERING VOLTAGE SHALL ONLY USE KNOCKOUTS ABOVE THE BOTTOM PORTION OF THE DISPLAY — CLASS 1 WIRING

WIRING ENTERING THE CONTROLLER CABINET THAT IS USED FOR SIGNAL AND/OR RS-485 COMMUNICATIONS SHALL ONLY USE KNOCKOUTS BELOW THE DISPLAY — CLASS 2 WIRING

GRIDPOINT

MM1204-EX
9.5"x13"

METERING SOURCE MUST COME FROM A 15-20 AMP 3 POLE BREAKER

3/4 CONDUIT BETWEEN ELECTRICAL PANEL AND CONTROLLER CABINET

CONFIRM APPROPRIATE AWG IS USED DEPENDING ON THE SIZE OF THE BREAKER USED FOR METERING

GREEN
ORANGE/WHITE
ORANGE
WHITE/ORANGE
ORANGE

CURRENT TRANSFORMER WIRING IS POLARITY SENSITIVE AS WELL AS ORIENTATION SPECIFIC, SO CONFIRMATION OF SPLICES AND COLOR CODING AT THE CONTROLLER IS VITAL.
WHITE = POSITIVE
BLACK = NEGATIVE

INPUT	LOAD DESCRIPTION	PHASE	CT SIZE
1	MAIN	A	600
2	MAIN	B	600
3	MAIN	C	600
4	RTU 1	A	150
5	RTU 2	A	150
6	RTU 3	A	150

CT INPUT LIST

EXAMPLE ELECTRICAL PANEL

GROUNDING LUG
NEUTRAL LUG
PHASE A
PHASE B
PHASE C

GREEN
WHITE
BLACK
RED
BLUE

CONFIRM THE CURRENT TRANSFORMER IS FACING THE PROPER DIRECTION

RTU 1
RTU 2
RTU 3

600V RATED

600V RATED PIGTAIL LEADS FROM CURRENT TRANSFORMERS

CURRENT TRANSFORMER WIRING SHOULD BE DRESSED WITHIN THE PANEL USING ZIP TIES

THE PROPER APPROPRIATE SPLICES AND STRAIN RELIEF SHOULD BE UTILIZED WITHIN JUNCTION BOX.

1-1/2" DEEP, 4" SQUARE ELECTRICAL JUNCTION BOX SHOULD BE USED WHEN EXTENDING CURRENT TRANSFORMER WIRING TO THE CONTROLLER

GRIDPOINT PROVIDED 24VAC TRANSFORMER

120VAC POWER SOURCE MUST COME FROM A 15-20A SINGLE POLE BREAKER

BLUE
YELLOW
BLACK
WHITE
T1

TO MOTION SENSOR 1
TO MOTION SENSOR 2
TO MOTION SENSOR 3

8"X8"X4" J-BOX (INSTALLER PROVIDED)

T-STAT/CO2 SENSOR MOUNTING

- MOUNT SHOWROOM'S T-STATS AND SENSORS AT 7'-3" ABOVE FINISHED FLOOR.
- MOUNT HARD PARTS T-STATS AND SENSORS AT 5'-6" ABOVE FINISHED FLOOR.

THERMOSTAT LABELING

LABEL EACH THERMOSTAT PER O'REILLY TERMINOLOGY WITH EXACTLY THE SAME UNIQUE IDENTIFYING "CODE" AS SHOWN ON THE "HVAC PLAN" ON SHEET M1 (FOR EXAMPLE: RTU-1, RTU-2, ETC. OR FURN-1, FURN-2, ETC.).

HUB-1

ORANGE
ORANGE/WHITE
GREEN

TO LCP-2

2-WIRE HUB MODULE CONNECTIONS	
HOST	FROM MM1204-EX
CHAIN 1	TS101 THERMOSTATS
CHAIN 2	LCP-2
CHAIN 3	N/A
R1/C1	N/A
R2/C2	N/A
R3/C3	N/A

8"X8"X4" J-BOX (INSTALLER PROVIDED)

CONNECT THE HVAC WIRES TO THEIR RESPECTIVE TERMINALS AT THE TS101. USE ORIGIONAL THERMOSTAT AS A REFERENCE WHILE LANDING INDIVIDUAL CONDUCTORS. FOLLOW COLOR CODE USED PRIOR TO TS101 INSTALLATION.

LAND THE 24VAC AND COMMON WIRES FROM THE HVAC UNIT ON TB1 TERMINALS R AND C AT THE TS101 INSTALL A JUMPER FROM TERMINAL R TO TB6 TERMINAL RH THEN JUMP TERMINALS RH AND RC TOGETHER.

TSTAT-1

TO NEXT TSTAT IN CHAIN

GRIDPOINT 12-10016-2 REV B

RH
RC
W1
W2/O
Y1
Y2
G
D
DC

HVAC CONTROL

R
C
A/+
B/-
REF
T1+
T1-
T2+
T2-

SHIELD

ORANGE
ORANGE/WHITE
GREEN

TO HVAC 3-Wire CO-1 96V-01341

RED
BLACK
22-24 AWG STP

NOTE:
7 CONDUCTOR 18 AWG IS SUFFICIENT. THIS CABLE IS GENERALLY PRE-EXISTING.

NOTE:
SHIELD WIRE SHALL BE LANDED ON THE NEGATIVE TERMINALS (I.E. T2-) OF THE HOST DEVICE FOR THE SUPPLY PROBE

SUPPLY PROBE 1

RED
BLACK

CAT5E

GRIDPOINT CONTACT

PLEASE CONTACT GRIDPOINT INSTALLATION MANAGEMENT @ 866-800-8906 FOR INSTALLATION CONTACT BASED ON THE STORE LOCATION.
EMAIL: SUPPORT@GRIDPOINT.COM

PRINTS ARE FOR: DESIGN [X] REVIEW [ ] PERMIT [ ] BIDDING [X] CONSTRUCTION [ ]

REVISIONS
DESCRIPTION: | DATE: | BY:

CONFIDENTIAL AND PROPRIETARY

SHEET TITLE:
FULL SYSTEM MINUS LIGHTING/MOTION SENSORS

FILE NAME:
O'REILLY PREFERRED ONE LINE DIAGRAM

DATE: 2/27/2018
DRAWN BY: DAVID COLWELL

SHEET NO:
EM 1.0

H:\OREY\0520\D\0520EM1.0 25 Oct 2018 - 9:40 am

O'REILLY PREFERRED ONE LINE DIAGRAM

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PROJECT:
NEW O'REILLY AUTO PARTS STORE
OLD FRANKLIN TURNPIKE
ROCKY MOUNT, VA
GRIDPOINT EMS

O'Reilly AUTO PARTS
CORPORATE OFFICES
233 SOUTH PATTERSON
SPRINGFIELD, MISSOURI 65802
(417) 862-2674 TELEPHONE

COMM # 4252
DATE: 11-2-18
REVISION DATE:

EM1.0