TR 100
Power Pack

.● steinel

Project Name:
Location:

TR 100 Specifications

Item No.	63101
Voltage	120/230/277 VAC, 50/60 Hz
Output	24 VDC +/- 5% 250 mA (class 2)
Load	20 A @ 120/230/277 VAC 50/60 Hz - ballast and incandescent load 1 hp @ 120-240 VAC, 50/60 Hz 20 A @120 VAC, 50/60 Hz - receptacle load
Environment	IP20 rated, -4°F to +130°F, -20°C to +55°C
Dimensions (LxWxD)	2.4 x 3.2 x 1.5 in 60 x 81 x 39 mm
Threaded Nipple Dimensions	.83 x .83 in 21 x 21 mm
Warranty	5 years
Certifications	C-UL-US Listed RoHS Compliant, UL 2043 Plenum Rated

The TR 100 is a full featured power pack that provides power to STEINEL low voltage occupancy sensors and other control devides. They are Class 2 output power supplies, suitable for parallel interconnection.

The power packs switch the load(s) ON and OFF in response to signals from the control devices. Each power pack contains a Mode Switch to select either manual ON or automatic ON operation. In manual ON mode, occupants operate a low voltage momentary switch to turn lights ON.

All wires have UL Style 1659, 250°C, 600V insulation:
- 18 AWG: Black for Line and White for Neutral
- 12 AWG: two Red wires for normally open dry contact from the 20A relay
- 22 AWG: 4 low voltage conductors: Red (+24VDC), Black (-24VDC), Blue (Control Input), Gray (Momentary Switch Input)

Key Features:

- Convenient mode switch selects either manual ON or automatic ON operation
- LED status indicator
- Switching is performed at, or close to, the zero-cross of the AC waveform in order to improve relay performance
- 1/2 inch threaded nipple and two lock nuts are used to secure to a standard 1/2" knockout
- Low voltage momentary switch input allows for manual control in automatic or manual mode
- Switching Power Supply provides up to 250mA of 24VDC to low voltage controls
- 20 A receptacle load control rated

120 / 230 / 277 V
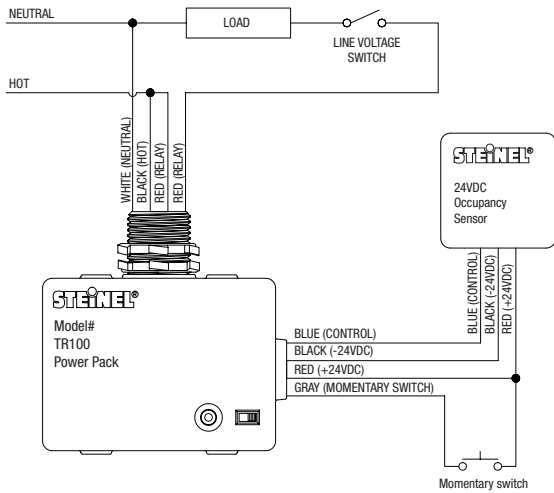Voltage

UL 2043
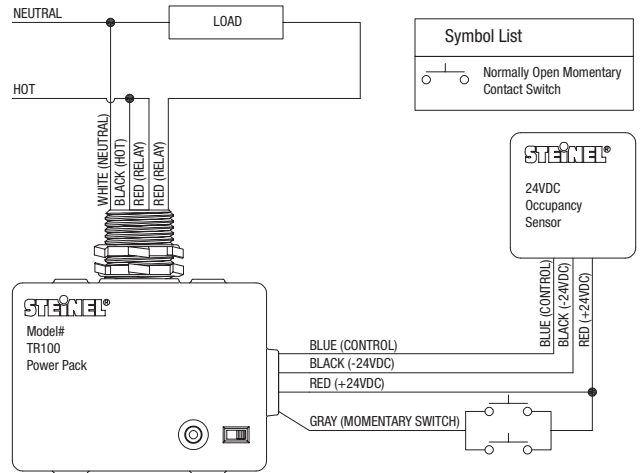UL 2043 Plenum Rated

IP20
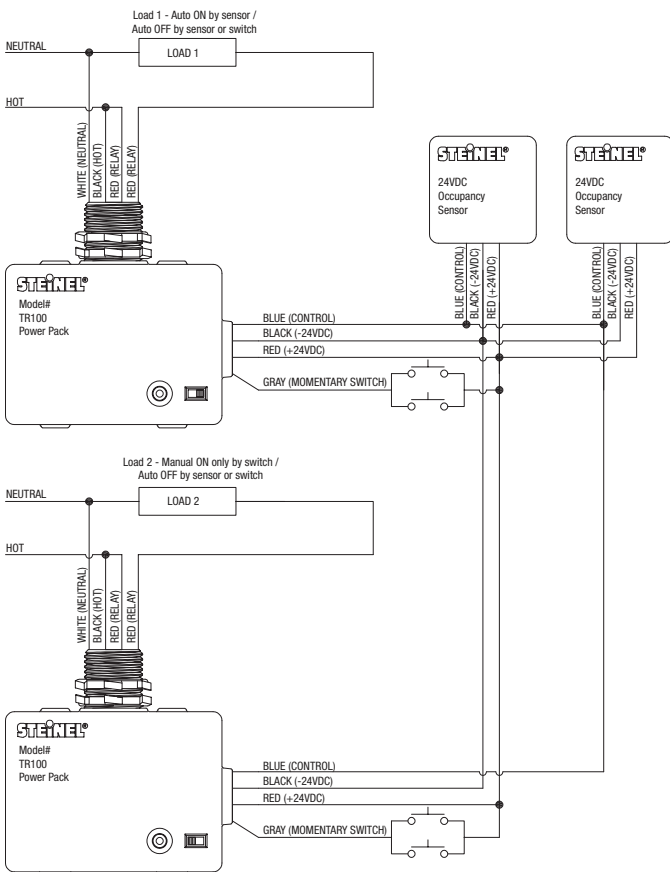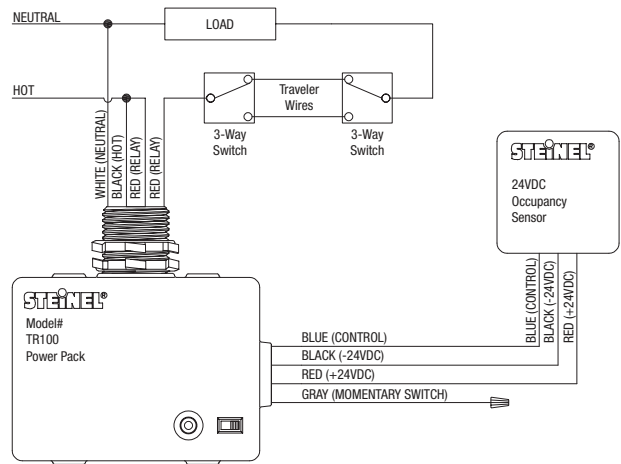IP 20 Rated

20 Amp 1 Hp
Load

Manual Auto/On
Operating Modes

TR 100
Power Pack

.steinel

Wiring

NEUTRAL
LOAD
LINE VOLTAGE SWITCH
HOT

WHITE (NEUTRAL)
BLACK (HOT)
RED (RELAY)
RED (RELAY)

STEINEL®
24VDC Occupancy Sensor

Model#
TR100
Power Pack

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)
GRAY (MOMENTARY SWITCH)

Momentary switch

Two Stage Multi Level 3-Way Switching

Load 1 - Auto ON by sensor /
Auto OFF by sensor or switch

NEUTRAL
LOAD 1
HOT

WHITE (NEUTRAL)
BLACK (HOT)
RED (RELAY)
RED (RELAY)

STEINEL®
24VDC Occupancy Sensor

STEINEL®
24VDC Occupancy Sensor

Model#
TR100
Power Pack

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)
GRAY (MOMENTARY SWITCH)

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)

Load 2 - Manual ON only by switch /
Auto OFF by sensor or switch

NEUTRAL
LOAD 2
HOT

WHITE (NEUTRAL)
BLACK (HOT)
RED (RELAY)
RED (RELAY)

Model#
TR100
Power Pack

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)
GRAY (MOMENTARY SWITCH)

Upon occupancy, lights (Load 1) attached to Power Pack (set to Auto ON) will illuminate automatically while lights (Load 2) attached to Power Pack (set to Manual ON) require the occupant to turn the lights on manually by means of a low voltage switch. All lights can be turned off manually by a low voltage switch or automatically by an occupancy sensor(s).

Low Voltage 3-Way Wiring

NEUTRAL
LOAD
HOT

Symbol List

○—○ Normally Open Momentary Contact Switch

WHITE (NEUTRAL)
BLACK (HOT)
RED (RELAY)
RED (RELAY)

STEINEL®
24VDC Occupancy Sensor

Model#
TR100
Power Pack

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)
GRAY (MOMENTARY SWITCH)

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)

Line Voltage 3-Way Wiring

NEUTRAL
LOAD
HOT

WHITE (NEUTRAL)
BLACK (HOT)
RED (RELAY)
RED (RELAY)

Traveler Wires
3-Way Switch
3-Way Switch

STEINEL®
24VDC Occupancy Sensor

Model#
TR100
Power Pack

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)
GRAY (MOMENTARY SWITCH)

BLUE (CONTROL)
BLACK (-24VDC)
RED (+24VDC)

Product Overview & Mounting

Line voltage wires

The TR 100 power pack mounts to a junction box with 1/2 inch knockouts.

Two lock nuts

1/2 inch threaded chase nipples

Low voltage wires

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LED status indicator

Manual/automatic mode switch