DT Quattro COM2-24

Presence Detector

.● steinel

Project Name:
Location:

64710	65300	65320	65330

DT Quattro COM2-24 Specifications

Item No.	64710 DT Quattro COM2-24
Accessories	65300 RC 3 service remote 65320 RC 4 user remote 65330 WGC wire guard cage
Voltage	18-24 VDC/VAC (34 mA) 50/60 Hz
Load Rating	control output - 1 A @ 30 VAC/VDC HVAC dry contacts - 1 A @ 30 VAC/VDC
Sensing Technology	passive infrared (PIR), single pyro, 11 detection levels, 520 switching zones, ultrasonic 40 kHz
Time Delay Setting	control output - 30 sec. - 30 min. pulse mode (approx. 2 sec. 'ON' 8 sec. 'OFF') IQ mode (automatic adjustment to the usage profile) HVAC dry contacts: 0 sec. - 10 min. switch 'ON' delay 1 min. - 2 hrs. stay 'ON' time, auto-HVAC mode
Light Level Setting	10 – 1000 lux / 1 – 100 fc
Environment	IP20 rated, 0° C to +40° C / 32° F to 104° F
Ultrasonic Detection Zones: (Coverage at 2.5 m / 9 ft)	presence: max. of 6 x 6 m (36 sq.m.) max. of 20 x 20 ft (400 sq.ft.) min. of 2 x 2 (4 sq.m.) min. of 6.5 x 6.5 ft (42.25 sq.ft.) radial / tangential: max. of up to 10 x 10 m (100 sq.m.) radial / tangential: max. of up to 32 x 32 ft (1000 sq.ft.)
PIR Detection Zones:	presence: max. of 3 x 3 m (9 sq.m.) max. of 10 x 10 ft (100 sq.ft.) radially: max. of 4 x 4 m (13 x 13 ft) tangentially: max. of 8 x 8 m (26 x 26 ft)
Dimensions	4.72 x 4.72 x 2.68 in, 120 x 120 x 68 mm (LxWxD)
Warranty	5 years
Certifications	C-UL-US Listed, RoHS compliant UL 2043 Plenum Rated, CA Energy Code compliant

The DT Quattro COM2-24 Dual Technology Presence Detector utilizes PIR and ultrasonic technologies to detect the presence or signature of a person in a space. The logic options for initial "ON" and "Maintained" state of occupancy gives design engineers and installation contractors the choice for proper control of lighting and HVAC in difficult applications where detection options are needed in a single device. Lighting loads are controlled in relation to both presence detection and selectable ambient light levels with the integrated force off photocell to maximize energy savings. The separate HVAC dry contact output is signaled only by presence detection and has a separate "ON/OFF" delay time feature set. STEINEL's world class PIR optics and ultrasonic signal processing provides unparalleled line of sight and volumetric presence detection. Operational choices of auto on or manual on with a momentary or maintained switch input. The convenient "COM-Link" feature enables multiple sensors to link together via the communication link for peer to peer grouping achieving expanded detection zones with control set up functions set at only one primary sensor for the entire group. The available service and user wireless remotes provide simplified commissioning and occupant convenience.

The Control PRO group of presence detectors are available in multiple presence detection technologies for the control of heating, ventilation and air-conditioning (HVAC) and lighting loads (as in the COM2-24 versions) and optional 1-10 volt dimming and daylighting options (in the DIM-24 versions).

Applications

The typical application is for lighting and HVAC in classrooms, conference rooms, computer rooms, storage rooms, workspaces, open office space with cubicles, general open areas, restrooms, stairwells, storage rooms, executive offices and private offices.

Key Features:

- Low voltage (18-24 VDC/VAC) sensor for use with a power pack or building automation system
- Independent ON and OFF time settings for the HVAC (NO/NC)
- PIR & Ultrasonic (40 kHz) Presence Detection
- Service and user wireless remotes available
- Manual ON mode (MAN) / Automatic mode (AUTO)
- Momentary / Maintained switch option
- 'ON' only / 'ON' & 'OFF' manual switching
- Light level feature turns lights off with sufficient daylight
- IQ Mode dynamically adjusts the 'ON' time delay by learning individual room occupancy
- Auto-HVAC mode

DUAL TECH
Passive Infrared
Ultrasonic

20 x 20 Ft Presence
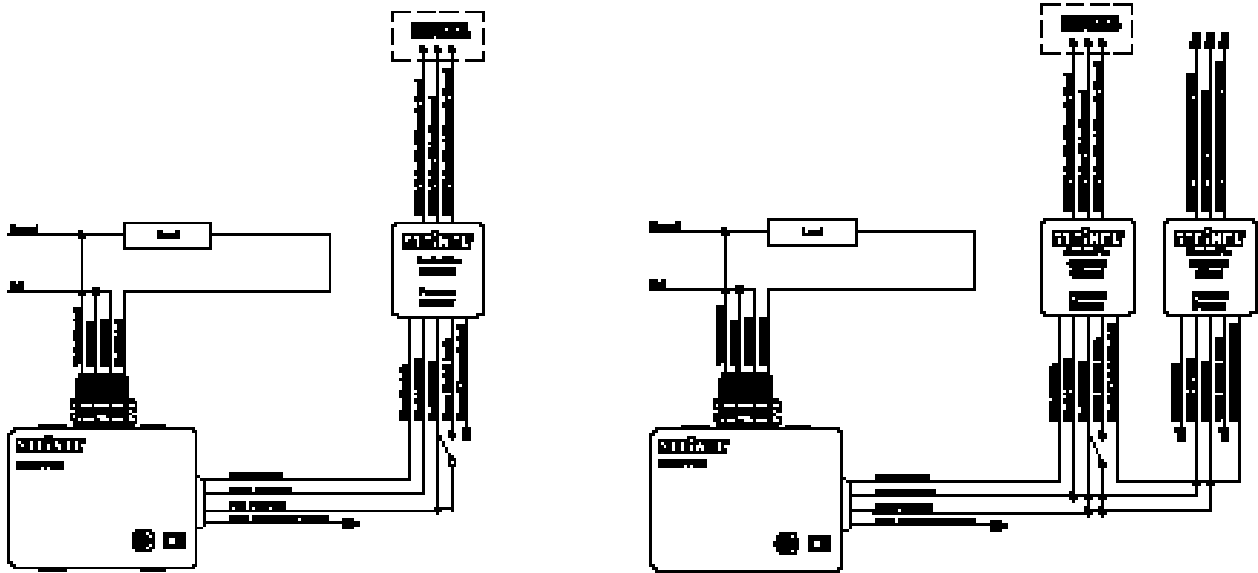32 x 32 Ft Max

1 - 100 fc

24 VDC
18 - 24 VDC/VAC & HVAC

30 Sec - 30 Min

DT Quattro COM2-24

Presence Detector
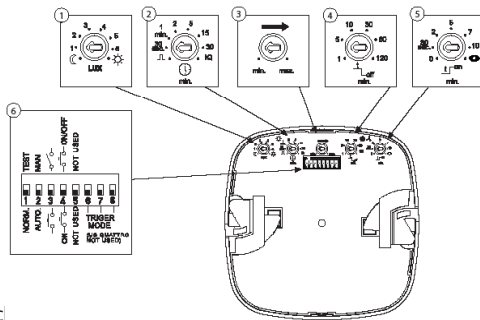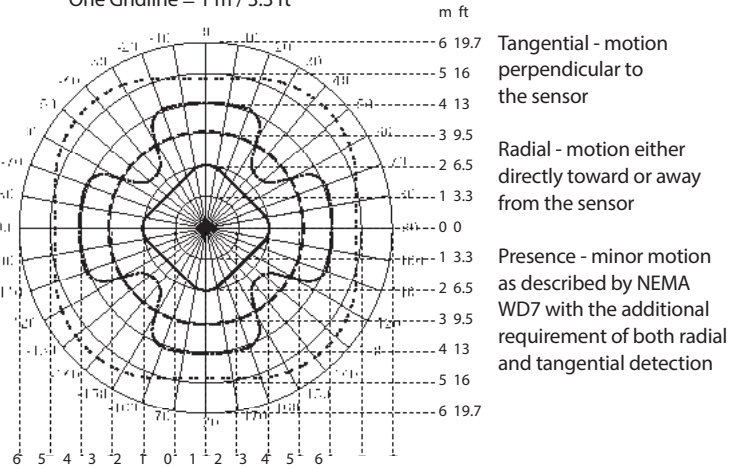
Wiring

Settings

1 - Light level setting
2 - Occupancy time delay setting
3 - Reach setting
4 - HVAC stay-'ON' time
5 - HVAC switch-'ON' delay
6 - Sensor DIP switch settings
7 - Trigger mode

DIP 1 - Normal mode / Test mode (NORM / TEST)
DIP 2 - Manual ON mode (MAN) / Automatic mode (AUTO)
DIP 3 - Momentary / Maintained switch input
DIP 4 - 'ON' only / 'ON' & 'OFF' manual switching
DIP 5 - Not used
DIP 6/7/8 - Trigger mode

⑦

Trigger Mode Options	Initial Occupancy	Maintain Occupancy	DIP 6	DIP 7	DIP 8
Option 1	Both	Either	↓ OFF	↓ OFF	↓ OFF
Option 2	Both	Both	↓ OFF	↓ OFF	↑ ON
Option 3	PIR	Either	↓ OFF	↑ ON	↓ OFF
Option 4	US	Either	↓ OFF	↑ ON	↑ ON
Option 5 Factory Setting	Either	Either	↑ ON	↓ OFF	↓ OFF
Option 6	US	US	↑ ON	↓ OFF	↑ ON
Option 7	PIR	PIR	↑ ON	↑ ON	↓ OFF
Option 8	Either	Both	↑ ON	↑ ON	↑ ON

The trigger mode enables the user to choose which sensing technologies should be used to initially turn the load on and which technologies are required to keep it on.

Coverage

Shown coverage diagram at 9 ft mounting height. Ultrasonic signal can be increased by hard surfaces and decreased by soft surfaces.
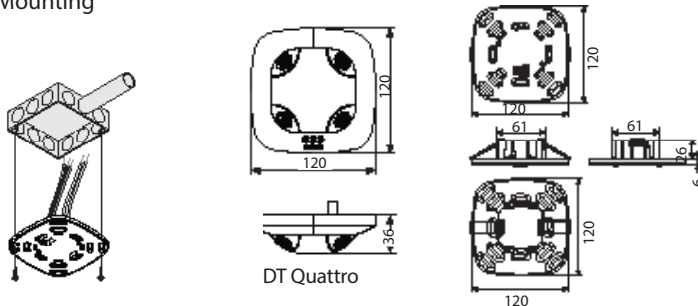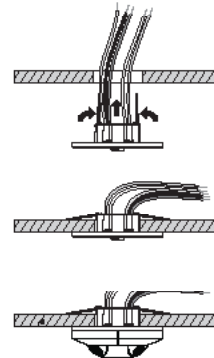
One Gridline = 1 m / 3.3 ft

m	ft
6	19.7
5	16
4	13
3	9.5
2	6.5
1	3.3
0	0
1	3.3
2	6.5
3	9.5
4	13
5	16
6	19.7

Tangential - motion perpendicular to the sensor

Radial - motion either directly toward or away from the sensor

Presence - minor motion as described by NEMA WD7 with the additional requirement of both radial and tangential detection

PIR RADIAL & PRESENCE DETECTION
PIR TANGENTIAL DETECTION
US TANGENTIAL & PRESENCE DETECTION
US RADIAL MAJOR MOTION DETECTION

Mounting

DT Quattro

Mounts to a 4" Square box, 4" Octagon box or Round 3.0 Mud-Ring

min. 68 mm (2 11/16 in)
max. 76 mm (3 in)

...d module

...sor Module

with quick mount spring tabs