MATRIX FAMILY

UL LISTED LOOP DETECTORS













PRIMARY APPLICATIONS











DESCRIPTION

BEA's Matrix Family of induction loop detectors is designed for vehicle detection application in industrial environments.

These UL 508 listed loop detectors offer a wide range of features including automatic boost sensitivity (ABS), pulse on entry and pulse on exit. The Matrix 3 provides learn on power up, as well as an independent dual loop detection setting.

The Matrix Family includes single and dual loop detectors with operating voltages of 110 – 120 VAC or 12 – 24 VAC / VDC, depending on model.

FEATURES & BENEFITS

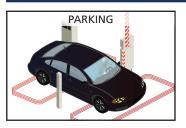
- **UL** Listed
- Available in single or dual loop models
- Two relay outputs
- Ideal for vehicle directionality and sequencing applications
- Settings are adjusted via two easy-to-use potentiometers
- Pulse on entry and pulse on exit presence detection



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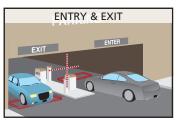
Customer Service: 800.523.2462 Technical Support: 800.407.4545

APPLICATIONS





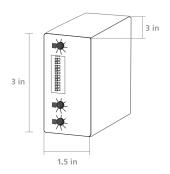




TECHNICAL SPECIFICATIONS

Tuning	Automatic
Connector	11-pin male (86CP11)
Presence Time	1 min – infinity
Pulse Time Output	100 ms or 500 ms
LED Indicators	Power: Green Loop Status 1: Red Loop Status 2: Red
Frequency Range	20 kHz – 130 kHz
Frequency Steps	Single Loop: 4 Double Loop: 2 (for each loop)
Sensitivity (ΔL/L)	0.005% - 0.5%
Reaction Time	Single Loop: 25 ms Double Loop: 50 ms (each channel)
Setup Time After Configuration	2 s max by channel
Power Supply (depending on model)	12 – 24 AC / DC ±10% 115 VAC ±10%
Power Frequency	48 – 62 Hz
Power Consumption	< 2.5 W
Temperature Range	−22 °F − 158 °F (−30 °C − 70 °C)
Protections	Loop Insulation Transformer Zener Diodes Gas Discharge Clamping
Inductance Range	20 μH – 1000 μH
Connection	86CP11 (Standard 11-Pin Round)
Relay Outputs Max. Contact Voltage Max. Contact Current	2 (free potential change-over contact) 230 VAC 5 A (resistive)
Setup Time at Power On MATRIXD/S MATRIXIIS MATRIX-3S MATRIX-3D	8 s max by channel 8 s max by channel 1.6 s max by channel 2.2 s max by channel
Norm Conformance	R&TTE: 1999 / 5 / EC EMC: 89 / 336 / EEC EMC: 89 / 336 / EE EMC: 2004 / 108 / EC FCC: 47 CFR 15 IC: RSS-210 ISSUE 5 UL Listed equipment for UL 508
Degree of Protection	IP40
Weight	7 oz
Dimensions	1.5 in (W) × 3 in (H) × 3 in (D)

DIMENSIONAL DRAWINGS



RELATED PRODUCTS



10MATRIXD110 110 - 120 VAC, **DUAL LOOP** DETECTOR



12 - 24 VAC / VDC, **DUAL LOOP** DETECTOR



10MATRIXIIS110 110 - 120 VAC, SINGLE LOOP DETECTOR



10MATRIXIIS1224 12 - 24 VAC / VDC, SINGLE LOOP DETECTOR



10MATRIX-3-9 12 - 24 VAC / VDC, SINGLE LOOP **DETECTOR**



10MATRIX-3-D 12 – 24 VAC / VDC, DUAL LOOP DETECTOR



11-PIN SOCKET BASED DIN RAIL



10PS12-24D 12 OR 24 VDC POWER SUPPLY



10MATRIXHARN 11-PIN **HARNESS**

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