

# B.E.A. LOOP DETECTORS : MATRIX FAMILY

Matrix Product Family Variances Description

## Matrix Family Product correspondence Table.

Standard Devices Designation	Alternative Designation (Used in some countries)	Customized devices
MATRIX-D-110	10MATRIXD110	10MATRIXD110E (D5562.14) *
MATRIX-D-1224	10MATRIXD1224	10MATRIXD1224E (D5562.11) *
MATRIX-D-220	10MATRIXD220	
MATRIX-S-110	10MATRIXS110	10MATRIXIIS110 ** 10MATRIXIIS110E (S5562.13) ***
MATRIX-S-1224	10MATRIXS1224	10MATRIXS1224E * 10MATRIXIIS1224 ** 10MATRIXIIS1224E (S5562.10) *** 10MATRIXIIRH (different PCB)
MATRIX-S-220	10MATRIXS220	

\* Same as standard device but with another label (Brand name) and adapted user's guide

\*\* Same as standard device but with another pins arrangement (Yellow housing)

\*\*\* Same as standard device but with another label, user's guide and pins arrangement (Yellow)

B.E.A. Detection Loops sensors are a family of loop detectors which can be classified into 6 different models. (The 6 Standard EU devices). These models vary by the number of Loop they can control and by the power supply specifications. The model family is summarized in the board below :

Configuration	Single Loop	Dual Loops
12-24V AC/DC	30.0232 (*)	30.0235
230V AC	20.0370 (=30.0231+tr 220V)	20.0373 (=30.0234+tr220V)
115V AC	20.0371 (=30.0231+tr 115V) (*)	20.0374 (=30.0234+tr115V)

(\*) Some of these are available in different pins arrangement and renamed MATRIX 2. MATRIX 2 (or MATRIX II) may be identified easily due to the YELLOW color of the housing.

Even for customized devices, there are no differences in terms of printed circuit board and software between the different supply voltage versions. Only the assembly of the power supply circuitry may vary from one model to another. Transformers are necessary for the 115V and 220V versions.

The 12-24V AC/DC version also exists in a customized PCB called 'Rite-Hite' (10MATRIXIIRH). There are no differences in terms of circuitry regarding the standard 12-24V AC/DC version. Nevertheless the orientation of some components has been changed from vertical to horizontal because the pcb is designed to be fitted directly in the housing of the customer instead of the standard housing.

The dual loops sensors are able to monitor one or two loops simultaneously. When two loops are used, they can be considered independently or combined for advanced detection features.