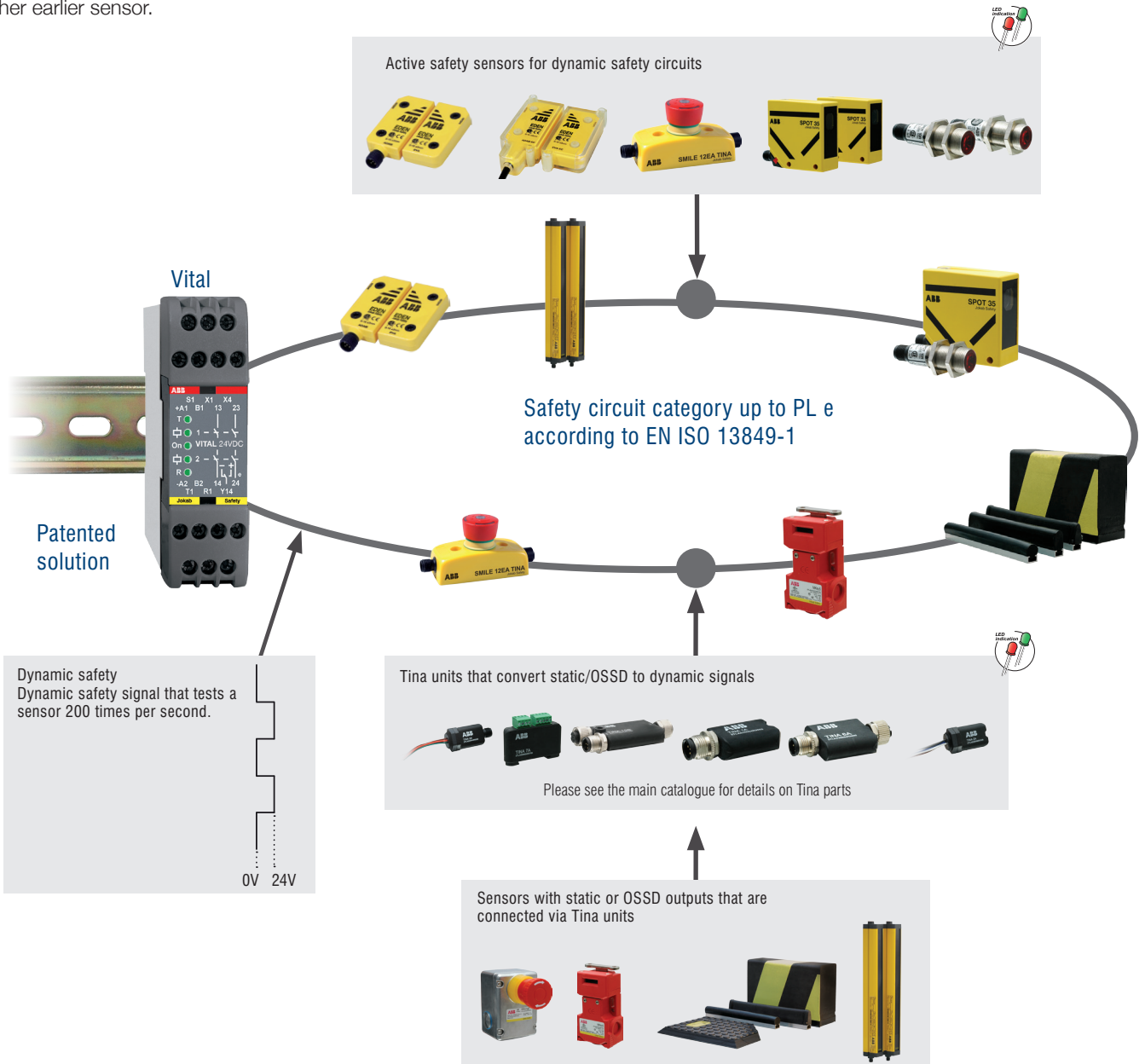


Safety system Vital & Tina

Dynamic safety circuit

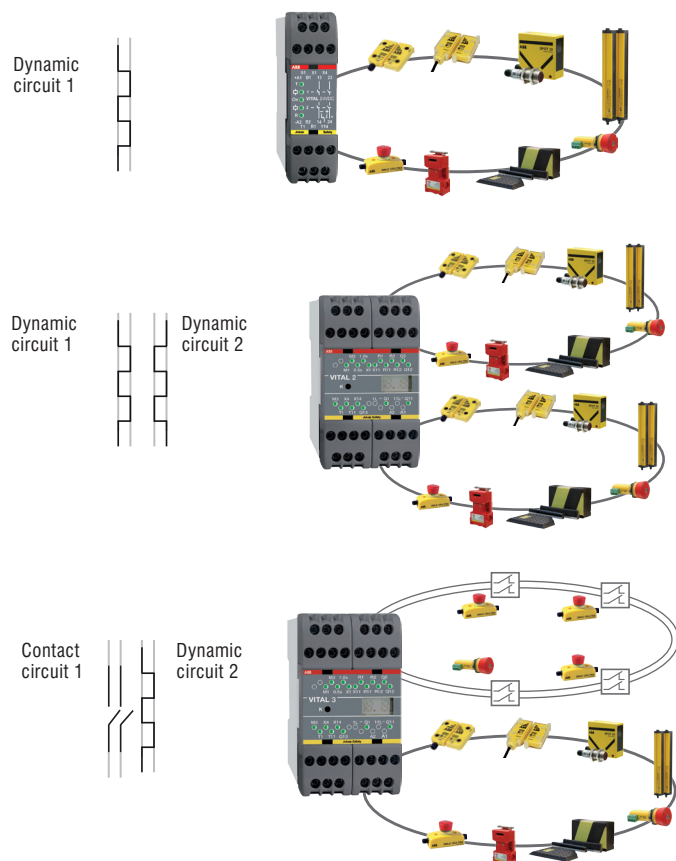
Vital is a safety controller with a dynamic safety circuit that can monitor up to 30 sensors, such as Eden, in accordance with the highest safety level. Vital has selectable manual or automatic resetting and dual outputs. (The Pluto safety PLC has many inputs for dynamic safety circuits.)

Each active sensor and Tina unit has LEDs that indicate OK (green), broken safety circuit (red) or flashing if the loop has been broken by another earlier sensor.



Safety system Vital & Tina

Vital is available in three versions



Vital 1

- Up to 30 sensors can be connected to the same dynamic safety circuit

Vital 2

- Two safety circuits are monitored by one module
- Simple system with extensive functionality
- Up to 10 sensors can be connected to each dynamic safety circuit
- Output group 2 can be set for time delay
- Three different modes of operation

Vital 3

- Two safety circuits are monitored by one module
- Devices with two-channel, opening contacts can be connected to one circuit
- Simple system with extensive functionality
- Output group 2 can be set for time delay
- Three different modes of operation

One Vital supervises the entire robot cell!!

This example shows a cell that consists of dynamic protection sensors connected to a Vital with the following functions:

Two charging stations

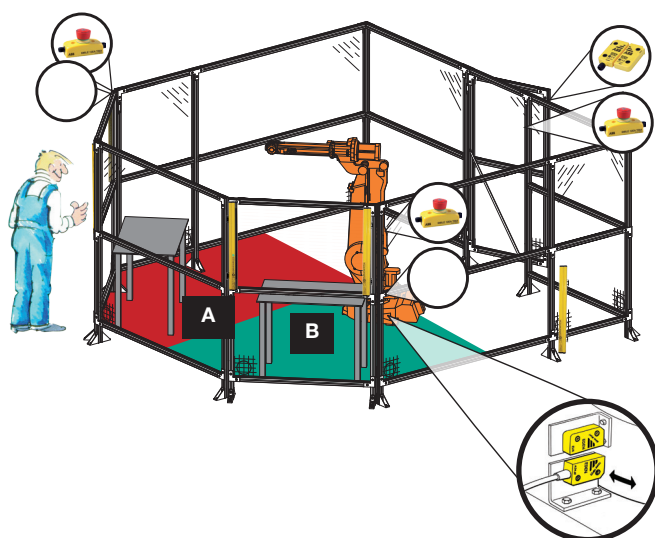
At each charging station a light curtain checks for anyone putting their hand into a risk area, and an Eden sensor checks whether a robot is inside the same risk area. This means that a stop is only ordered if a robot and a person are in the same area. When the station is clear, the person presses the reset button connected to the light curtain.

Fence with Eden-interlocked door

If the door is opened, the robot stops. To reset the robot system, the door must be closed and a supervisory reset button operated.

Three emergency stops with Tina units

If any of the emergency stop buttons is pressed, the robot performs an immediate emergency stop.



Selection

Type	Part No	Product Hierarchy 470002 Order Code
Vital 1	20-052-00	2TLA020052R0000
Vital 2	20-070-43	2TLA020070R4300
Vital 3	20-070-44	2TLA020070R4400