



SERIES 3450

Push'n'Drive Keyless-Go-System
Universal Keyless-Go-System for
Off-Road Vehicles



▶ PAGE
251 – 252

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH'N'DRIVE



SERIES 3450 – PUSH'N'DRIVE KEYLESS-GO-SYSTEM

UNIVERSAL KEYLESS-GO-SYSTEM FOR OFF-ROAD VEHICLES



PRODUCT FEATURES

- Keyless start of vehicles (keyless) – Push'n'Drive
- Generally available off-the-shelf system
System outputs configurable over CAN-Bus
- Simple adaption with hardwired outputs
- Push'n'Drive using HITAG2 encryption for information exchange between key and ECU
- Simple integration with no additional tooling and development costs
- Good price-performance ratio
- Proven Marquardt technology with numerous premium car companies

ON REQUEST

- With keyless-entry-function
- 24 V-version
- Customer specific key fob
- Solution for fleet management
- Remote keyless-entry-function

Operating voltage	8 – 16 V DC
Sleep current	< 100 µA
Operating temperature	-40 °C ... +85 °C
Frequencies	LF 21.85 KHz (ECU to key) RF 433.92 MHz (key to ECU)
Mechanical life endurance	MTBF 15 years; Key battery life: 5 years (battery changeable)
Mating connector ECU	Tyco 638518–5 sealed 12 pins
Range	Adjustable up to 4 meters
Interfaces	CAN
Security	HITAG 2
Outputs	High-side Driver 0.4 A continuous 2 Relays (NO and NC): - 25 A max. carrying current for 10 minutes - 30 A max. switching current
Inputs	CAN – 2 Wire Hardwire – Momentary switch (start/stop input)
Package	Standard Optional
	1 ECU, 2 keys Start/Stop button, connector for ECU
Protection Type	IP 65 and IP 67

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

MICRO-SIGNAL SWITCHES

SMAP-ACTION SWITCHES

SENSORS

ECO

PUSH'N'DRIVE



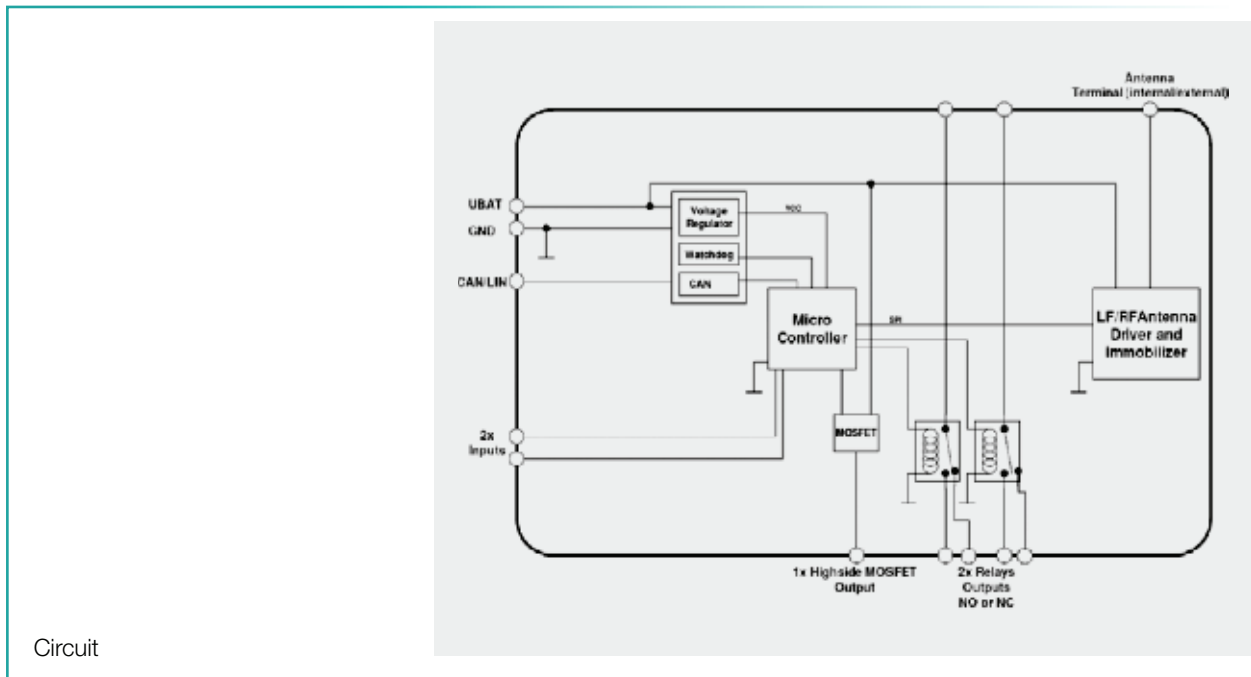
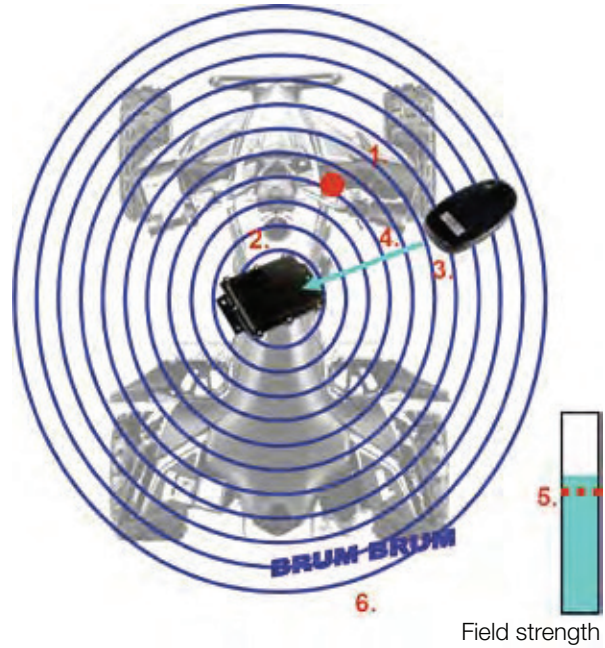
SERIES 3450 – PUSH'N'DRIVE KEYLESS-GO-SYSTEM

UNIVERSAL KEYLESS-GO-SYSTEM FOR OFF-ROAD VEHICLES

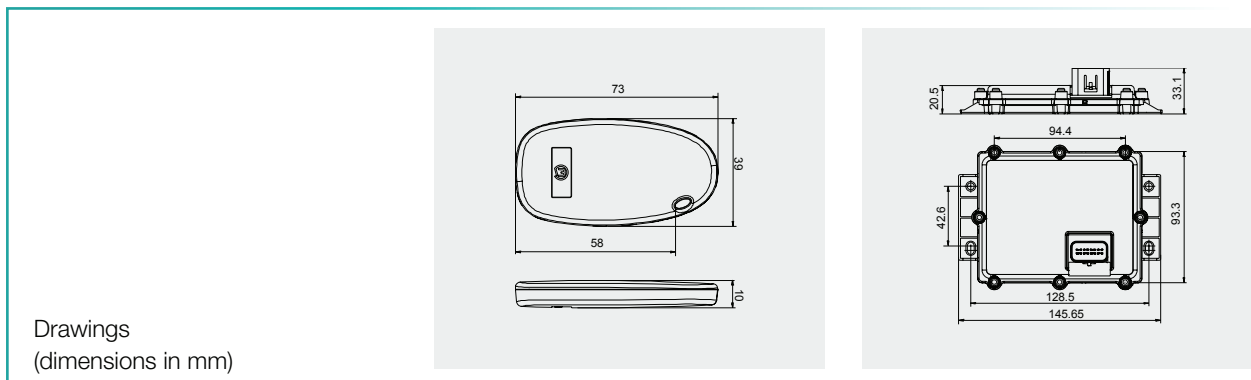
Example system operation:

1. Start/Stop button gets pressed, system wakes up.
2. ECU sends location field to search key.
3. Key picks up field strength.
4. Key sends strength to ECU.
5. ECU compares strength with a predefined threshold.
6. ECU enables functionality when key is in range.

- If valid key is not in range, ECU will search two more times before going back to sleep mode.
- Start/Stop button gets pressed second time, all outputs turn off, ECU goes to sleep mode.



Circuit



Drawings
(dimensions in mm)

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH'N'DRIVE