

# HFC Refrigerant Level Switch - 90...240 V AC Category: HBSR-U-SSR2



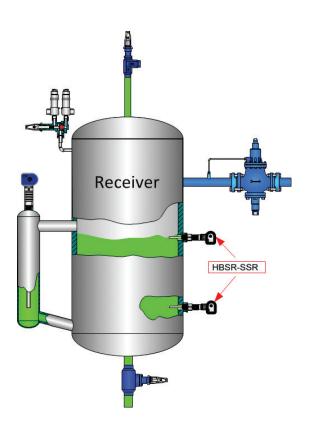
## **Functional description**

HBSR-U-SSR2 is a level switch for the detection of HFC refrigerants.

Typically it is installed in/on the refrigerant vessels, pump separators, economizers or heat exchanger.

The sensor is specially built to resist high pressure and low temperatures.

The switch has a built-in local power supply for direct use on grid supply 90...240 VAC. A solid state relay can also operate a valve directly.









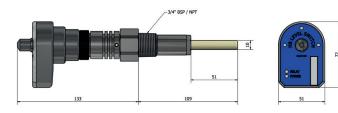
## **Technical data**

Power supply		Approvals	
Supply	90240 VAC	CE	EN 61000-2
Current consumption	<10 mA	<b>Mechanical specifications</b>	
Plug connection	M12 - DIN 0627	Thread connection	3/4" NPT / BSPP
Output		Material – mechanical parts	AISI 304 / PTFE
Solid state relay output:	90240 VAC – 40 W	Material – electronic parts	Nylon 6 (PA)
Output function	NC or NO	Dimensions	See drawing
Cable specification (power supply)		<b>Environmental conditions</b>	
Cable size	5 m - 3 x 0.25 mm2	Ambient temperature	-30+50°C
Cable glands	PG7 / M8	Refrigerant temperature*	-60+80°C*
Cable resistance	500 Ω/Km	Max pressure	100 bar
Indication		Protection degree	IP65
Level indication	3 x LED (green)	Vibrations	IEC 68-2-6 (4g)
Relay-on activation	1 x LED (yellow)		
Power supply	1 x LED (green)		

\* Max temperature specified for R134a.

For R410a, R507, R22, R1234ze & R1234yf the max temperature is +40 °C.

## **Mechanical dimensions**



# **Electrical installation**



Supply: 90...240 V AC -50/60 Hz

1 = Brown: 90...240V AC supply 2 = White: 90...240V AC supply 3 = Blue - Potential free solid state, Max 240V AC / 40 W 4 = Black - Potential free solid state, Max 240V AC / 40 W



#### **Ordering codes**

Output	Thread type	Ordering code
Solid state relay - NO	3/4" NPT	HBSR-U-SSR2/NO-2
Solid state relay - NO	3/4" BSPP	HBSR-U-SSR2/NO-6
Solid state relay - NC	3/4" NPT	HBSR-U-SSR2/NC-2
Solid state relay - NC	3/4" BSPP	HBSR-U-SSR2/NC-6

## Spare parts for HBSR-U-SSR2

Position	Specification	Туре	Ordering code
1	Electronic parts	NO	HBSR-U-SSR2/NO-EL
		NC	HBSR-U-SSR2/NC-EL
2	Mechanical parts	34 <b>" NPT</b>	HBSR-U-MEK-2
		34" BSPP	HBSR-U-MEK-6

### Spare parts for HBSR-HFC-SSR-2

Position	Specification	Туре	Ordering code
1	Electronic parts	NO	HBSR-HFC-SSR-2/NO-EL
		NC	HBSR-HFC-SSR-2/NC-EL