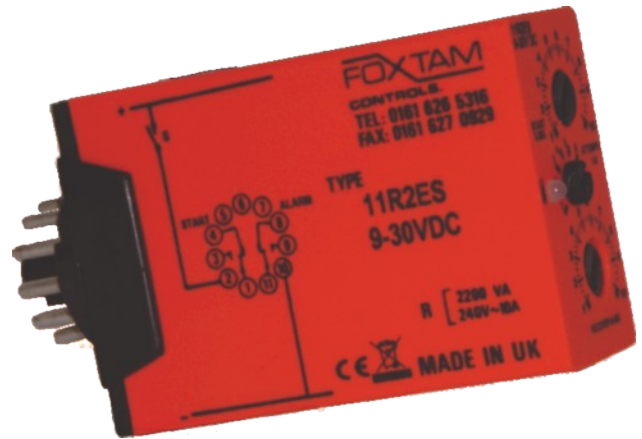


ENGINE START ATTEMPT & ALARM RELAY

TYPES: 11R2ES

FEATURES

- 11 pin plug in
- Selectable number of start attempts 1-8
- Start time adjustable 3-30 secs
- Recovery time adjustable 6-60 secs
- Supply voltage 9-30VDC
- LED indication
- Separate start relay output
- Separate alarm relay output



DESCRIPTION & MODE OF OPERATION

An 11 pin plug in engine start attempt relay for use in starting combustion engines connected to generators. The number of start attempts is selected by the middle selector switch 1-8. The start time is set by the top potentiometer between 3-30 secs and the recovery time by the bottom potentiometer between 6-60 secs.

When the auxiliary supply (9-30VDC) is first applied (+2 & -10) the "Start" relay energises immediately for the "Start" time. After expiration of the "Start" time the relay de-energises for the "Recovery" time. This cycle continues for 1-8 times as set by the number on the "Attempts" switch. If the engine starts the power supply to terminals 2 & 10 should be thus wired so that it is interrupted. The "Alarm" relay will energise after the last start attempt thus an "engine fail to start alarm", this status will remain until the auxiliary supply is removed.

SPECIFICATIONS

Supply & time:

Supply voltage:	9-30VDC
Power consumption:	0.6W
Number start attempts:	1-8
Start time:	3-30 secs
Recovery time:	6-60 secs
Reset time:	50mSec

General:

Operating temperature:	-20°C to +40°C
Storage temperature:	-20°C to +60°C
Max cable size:	4mm
CE marked:	Yes
In accordance with:	EN61000-6-1: 2007
	EN61000-6-3: 2007
	EN61010-1: 2002

Repeat accuracy:	±0.5%
Housing material:	Thermo plastic ABS (DIN7728), auto extinguishable according to UL94V0

Output:

Output:	Relay 2 x SPCO
Rated:	10A/250VAC AC1
Mechanical life:	30 Million ops
Electrical life:	200K at 10A/250VAC

