## Compact Solutions: New X Range CSR models with Current relay and NTC

Huayi Compressor Barcelona has already successfully introduced the innovative CSR+NTC electrical version in the X range for LBP and HMBP applications.

See below the list of models already available with this solution.

LBP models										
REFRIGERANT	MODEL	E DISPLACEMENT	VOLTAGE	MOTOR	Compressor Performance ASRHAE conditions					
					-23, kcal/h	3° C W/W				
R404A	MX18FBa	18.40	220-240V 50Hz	CSR	700	1.36				
R404A	MX21FBa	20.72	220-240V 50Hz	CSR	805	1.35				
R404A	MX21FGa	20.72	200-220/220-230V 50/60Hz	CSR	805	1.35				
R404A	MX23FBa	23.20	220-240V 50Hz	CSR	915	1.35				
R404A	MX23FGa	23.20	200-220/220-230V 50/60Hz	CSR	915	1.34				
R290	NX18FBa	18.40	220-240V 50Hz	CSR	705	1.44				
R290	NX21FBa	20.72	220-240V 50Hz	CSR	780	1.44				
R290	NX23FBa	23.20	220-240V 50Hz	CSR	862	1.41				

LBP models										
REFRIGERANT	MODEL	DISPLACEMENT	VOLTAGE FREQUENCY	MOTOR	Compressor Performance ASRHAE conditions					
					7,2° C					
		cm <sup>3</sup>			kcal/h	W/W				
R404A	MX16TBa	16.03	220-240V 50Hz ~1	CSR	2030	2.15				
R404A	MX18TBa	18.40	220-240V 50Hz ~1	CSR	2330	2.18				
R404A	MX18TGa	18.40	200-220/220-230V 50/60Hz	CSR	2330	2.18				
R404A	MX21TBa	20.72	220-240V 50Hz ~1	CSR	2620	2.15				
R404A	MX21TGa	20.72	200-220/220-230V 50/60Hz	CSR	2620	2.15				
R290	NX18TB	18.40	220-240V 50Hz ~1	CSR	2102	2.61				
R290	NX21TBa	20.72	220-240V 50Hz ~1	CSR	2334	2.55				

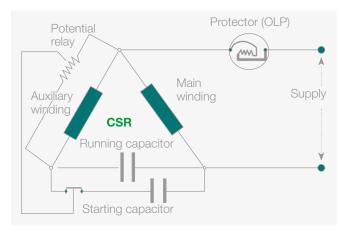
Bifrequency models values at 50Hz

As mentioned in previous communications, the basis for the innovation is the use of a standard current relay provided with a NTC resistance which allows replacing the conventional potential relay, which usually has to be located in an external and bulky remote electrical box.





The main purpose of the fixed NTC in a standard current relay is to reduce voltage peaks in the relay contacts. It allows not needing the bulky external connecting box, which creates a voltage relay. Therefore, it makes the product more competitive in terms of costs and better in terms of space requirements (see Fig. 1 and 2).



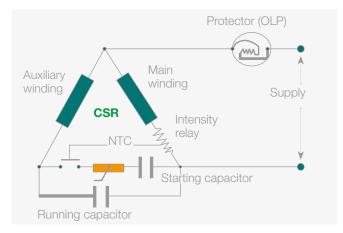


Fig. 1. CSR with Potential relay

Fig. 2. CSR+NTC solution

In the following drawing **FTE-2148B.2** and **FTE-2152B.3** you will find the main differences between both compressor versions.

Please do not hesitate to contact us about any doubt or any further explanation you might need in regards to this subject.





