

## The General

Over load protector and Motor Starter are available both as a single package and separate components for refrigerator and air conditioning compressor applications.

Over load protector are designed, with the help of snap acting bimetal technology, to prevent compressor motor windings from being overheated and burnt out under the overload and locked rotor conditions by interrupting current. Motor starter functions, by employing PTC switching technology, allow current to flow through starting winding of compressor at the start of compressor and to cut current flow to start winding once motor reaches stabilized rotation.

## Features

- Improved job efficiency by combining the PTC relay and OLP
- Customer-tailored design, agile flexibility that meets customer's case-by-case requirements (Molex connector, Capacitor mounting, One-touch clasp)
- Safety function embedded in the product for end-user's safety under increasing attention on product safety
- More reliable product based on the consistent design management, production process from raw material to final goods, under skilled craftsmanship





# Assy Combo

MSP(OLP+PTC Package)





## MSP Device coding

MSP Code name (Ex : 37319NFH220HMA2)								
37	319	N	F	H	220	H	MA	2
Basic Name	OLP Code				PTC Code	MSP Code	COMBO	OLP
	Heater No.	Open Temp. $\pm 5^{\circ}\text{C}$	Close Temp. $\pm 9^{\circ}\text{C}$	SMP COVER	Resistance ( $\Omega$ )	Base/Cover	TYPE	Maker
MSP	100-811	J : 100	D : 52 $^{\circ}\text{C}$	A : PBT	3R3 : 3.3 $\Omega \pm 20\%$	S : PBT	MA: RSCR	2:JAHWA
		K : 105	F : 61 $^{\circ}\text{C}$		3R3 : 3.3 $\Omega \pm 20\%$	B : PET	(SIZE A:2.5mm/B:38mm)	
		L : 110	H : 69 $^{\circ}\text{C}$	B : PBT	4R7 : 4.7 $\Omega \pm 20\%$		MB: RSCR	
		M : 115	L : 78 $^{\circ}\text{C}$		6R8 : 6.8 $\Omega \pm 20\%$		(SIZE A:2.5mm/B:33mm)	
		N : 120		H : PBT (Halogen free)	100 : 10 $\Omega \pm 20\%$	H : PBT (Halogen free)	MC: RSCR	
		P : 125			150 : 15 $\Omega \pm 20\%$		(SIZE A:6.0mm/B:38mm)	
		R : 130			220 : 22 $\Omega \pm 20\%$		MD: RSCR	
		S : 135			330 : 33 $\Omega \pm 20\%$		(SIZE A:6.0mm/B:33mm)	
		T : 140			470 : 47 $\Omega \pm 20\%$		CF(General)	
		U : 145			680 : 68 $\Omega \pm 20\%$			
		V : 150					NF(General)	
		W : 155						
		X : 160					CN(General)	
							NN(General)	

## General Combination Type

Type	CF	CN	NF	NN
Shape				
Remark	<ul style="list-style-type: none"> <li>Bracket type</li> <li>Separate assy of wire harness</li> <li>Capacitor mountable</li> </ul>	<ul style="list-style-type: none"> <li>Separate assy of wire harness</li> <li>Capacitor mountable</li> </ul>	<ul style="list-style-type: none"> <li>Bracket type</li> <li>Separate assy of wire harness</li> </ul>	<ul style="list-style-type: none"> <li>Separate assy of wire harness</li> </ul>

## Molex housing Combination Type

Type	RSCR (MA, MB, MC, MD)		RSIR (ME, MF)	
Shape				
Remark	<ul style="list-style-type: none"> <li>Bracket type</li> <li>Molex typed Housing</li> <li>Capacitor mountable</li> </ul>	<ul style="list-style-type: none"> <li>Molex typed Housing</li> <li>Capacitor mountable</li> </ul>	<ul style="list-style-type: none"> <li>Bracket type</li> <li>Molex typed Housing</li> <li>Capacitor mountable</li> </ul>	<ul style="list-style-type: none"> <li>Molex typed Housing</li> </ul>