



B01-2015\_BFL-EN



# Fast Lock Coils

Castel has always been aware of environmental sustainability issues and gives its contribution to a cleaner environment, supplying the refrigeration and air conditioning industry with state-of-the-art and environment-friendly technology. With its commitment and steady research in its laboratories, Castel has developed a whole range of products using natural refrigerants, which reduce emissions to the minimum.



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## Application

For the normally closed solenoid valves Castel is pleased to announce that it puts at disposal of its own customers the following new coils type "FAST LOCK":

- Series HF2 (catalogue numbers 9300), only for A.C. , interchangeable with the actual series HM2 (catalogue numbers 9100)
- Series HF3 (catalogue numbers 9320), either for A.C. or for D.C. , interchangeable with the actual series HM3 (catalogue numbers 9120)

The new system "FAST LOCK" guarantees a secure fixing , without errors and oversights of the coil on the valve, making it easy and quick assembly and disassembly. The coils "FAST LOCK" can be mounted on the valve and subsequently dismantled without the aid of any equipment.

**NB:** coils type FAST LOCK cannot be mounted on normally open valves produced by Castel.

## Construction

Coils HF2 (9300) are class H , whereas coils HF3 are class F , in compliance with IEC 85 standard and their construction is in compliance with EN 60730-1 and EN 60730-2-8 standards. The windings are made with copper wire, insulation class H 180 °C, in compliance with IEC 85 standard. The outer casing is provided with dielectric and waterproof resins that assure a reinforced insulation making the coils

suitable for all assemblies.

Protection against electric contacts is class I for all the coils. Therefore, for safety purposes, coils must be effectively connected to a ground system. Rubber gaskets on the lower end of coil ensure moisture protection of winding.

Coils HF2 and HF3 may be joined to all connectors produced by Castel except type 9155/R01; protection degree guaranteed by this system, coil (HF2, HF3) + connector, is IP65 according to EN 60529.

Terminals of coils series HF2 and HF3 consist of two line terminals plus one ground terminal.

The coils are designed for continuous use. The solid construction of these coils is suitable for heavy-duty applications in refrigerant systems. The maximum ambient temperature for all coils is 50 °C.

## Electric Type Approval

All the coils series 9300 and 9320 are manufactured according to Electromagnetic Compatibility (EMC) Directive 2004/108/EC.

Coils series 9300 at 110 VAC , 220/230 VAC and 240 VAC supply, and coils series 9320 at 220/230 VAC supply are manufactured according to Low Voltage (LV) Directive 2006/95/EC.

Coils series 9300 at 110 VAC , 220/230 VAC and 240 VAC supply, are approved by the German registration body VDE.

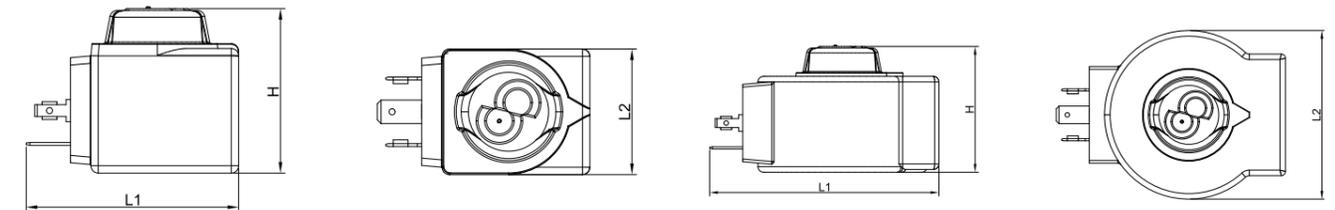
## General Characteristics of coils

Coil type	Catalog Number	Voltage [V]	Voltage Tolerances [%]	Frequency [Hz]	Connections	Protection Degree
HF2	9300/RA2	24 A.C.	+10 / -10	50 / 60	Junction box DIN 43650	IP65 EN 60529 (with junction box)
	9300/RA4	110 A.C.				
	9300/RA6	220/230 A.C.	+6 / -10			
	9300/RA7	240 A.C.	+10 / -10			
	9300/RA8	380 A.C.				
HF3	9320/RA6	220/230 A.C.	+6 / -10	50 / 60	Junction box DIN 43650	IP65 EN 60529 (with junction box)
	9320/RD1	12 D.C.	+10 / -5	-		
	9320/RD2	24 D.C.				
	9320/RD4	48 D.C.				



## Coils Consumptions, Dimensions and Weight

Coil type	Catalog Number	Voltage [V]	Consumptions at 20 °C [mA]						Dimensions [mm]			Weight [g]
			Start			Working			L1	L2	H	
			50 [Hz]	60 [Hz]	D.C.	50 [Hz]	60 [Hz]	D.C.				
HF2	9300/RA2	24 A.C.	920	825	-	527	420	-	57,5	34	44,5	180
	9300/RA4	110 A.C.	230	205		128	114					
	9300/RA6	220/230 A.C.	140	128		68	58					
	9300/RA7	240 A.C.	100	87		54	43					
	9300/RA8	380 A.C.	58	51		32	23					
HF3	9320/RA6	220/230 A.C.	190	160	-	110	80	-	82	61	45,5	455
	9320/RD1	12 D.C.	-	-	1720	-	-	1720				
	9320/RD2	24 D.C.			895			895				
	9320/RD4	48 D.C.			460			460				



Pessano con Bornago, 16.12.2015

**RE:** New Coils “FAST LOCK” series HF2 and HF3

Dear Customers,

It is our pleasure to introduce the new coils series “FAST LOCK” for Castel normally closed solenoid valves:

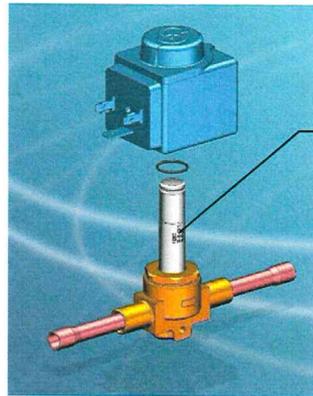
- Series HF2 (part numbers 9300/..), only for A.C., interchangeable with the actual series HM2 (part numbers 9100/..)
- Series HF3 (part numbers 9320/..), both for A.C. and D.C., interchangeable with the actual series HM3 (part numbers 9120/..)

Protection against electric contacts is CLASS I, rubber gasket on the lower end of coil ensure moisture protection of winding.

Coils HF2 and HF3 may be joined to all connectors produced by Castel except type 9155/.. . Protection degree guaranteed by this system coil (HF2, HF3) + connector is IP65 according to EN 60529.

The new system “FAST LOCK” allows easy and quick assembly of coil; no need for any tools to assembly and/or disassembly the coil.

The part number of the solenoid valve currently reported on the yellow cap will be printed by laser on the armature (only series 1020 and 1028, see picture n.1), making the information indelible and durable as well as to ensure traceability. All the others normally closed solenoid valves will be supplied with the tear resistance label (see picture n. 2).

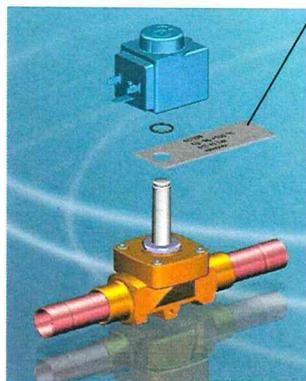


Printed by  
laser  
1020/..  
1028/..



Picture n.1 New Coil “FAST LOCK”

Actual Coil



Tear  
resistance  
1064/..1068/..  
1078/..1079/..  
1098/..1099/..



Picture n.2 New Coil “FAST LOCK”

Actual coil

The new range, available starting from April 2016, will gradually replace the current series HM2 e HM3.

The technical data and overall dimensions of the coils will be available in attached catalogue or through our web site, [www.castel.it](http://www.castel.it).

We will at your disposal for any further information you may need.

Kind regards,

Antonio Sepe  
Product Manager