

Drying, filtering and cléaning cores

→ CCY / PLATINIUM 48

Applications

• Interchangeable elements for the filter shells (BDCY, BCY, BCY-HP, BBCY, ACY, BACY and HCYBF) ensuring the filtration, drying, or cleaning of the refrigerants and refrigerating oils of the air



Functional features

- Products are compatible with CFCs, HCFCs, HFCs, CO₂s, as well as with their associated oils and additives. Products are designed for use of non-hazardous refrigerants from group 2 of PED 97/23/EC. To use CARLY components with fluids of the hydrocarbon group 1 - Propane R290, Butane R600, Isobutane R600a, Propylene R1270 - with HFOs and transcritical CO, and for a RANKINE organic cycle application, contact CARLY technical department.
- The cartridges CCY HP, PLATINIUM 48 and N:
 - \rightarrow can be used with all the filter shells that can be found on the market.
 - complete set of flange gaskets \rightarrow are supplied with a corresponding to most of the filter shells that can be found on the market.
 - → are designed and manufactured to trap with a low pressure drop the humidity and impurities conveyed by the refrigerant and resist against vibrations and the circuit's pressure cyclings.
- The cleaning and drying cores CCY HP and N have a high acid adsorption power.
- The filtering cartridge CCY 48 HU can be used for all types of refrigerating oils with or without additives.

CARLY advantages

• The cores CCY HP, PLATINIUM 48 and N are oven-dried in order to be perfectly dehydrated before being packed in an easy-to-open sealed box. These cores have high humidity adsorption capacities at high and low condensation temperatures.

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- The CCY I and F cores are efficient whichever the refrigerant flow direction.
- Efficient solutions for refrigerating circuit decontamination thanks to a complete range of cores.
- Presence of a date sticker to be filled in after the maintenance operations (core change).



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Warning

Before selecting or installing any component, please refer to the chapter 0 - WARNING.

General assembly precautions

The installation of a component in a refrigeration system by a skilled professional, requires some precautions:

• Some are specific to each component, and in this case, they are specified in the **RECOMMENDATIONS SPECIFIC** part defined hereafter ;

- Other are general to all CARLY components, they are presented in the chapter 115 – GENERAL ASSEMBLY PRECAUTIONS.
- The recommendations relating to the CARLY components for the subcritical CO₂ applications are also developed in chapter 115 **GENERAL ASSEMBLY PRECAUTIONS**.

Specific recommendations for drying, filtering and cleaning cores CCY HP, N, F, I, HU and PLATINIUM 48

- Refer to assembly precautions for replaceable core filter drier shells and recommendations for liquid line: BDCY, BCY, BCY-HP, BBCY, for suction replaceable core filter shells: BDCY, ACY, BACY, and for HCYBF replaceable core oil filter shells.
- Remove cores from their sealed can at the very last moment before putting them in the shells.
- The cartridges CCY 48 HP, 48 N and PLATINIUM 48 must be positioned in various cartridge holders with their funnel shape at the larger end (see chapter "technical features of cores ", Ø 4 on drawing N°2) on the box outlet union side.
- It is imperative to use CCY A adapters with chemical cores (CCY N, CCY HP and PLATINIUM 48) in the suction filter shells. Do not forget to remove them before installing CCY F and CCY I cores.
- Important : The CCY cores must be changed very regularly and particularly the CCY HP and PLATINIUM 48 cartridges must be absolutely replaced :
 - ➔ after each intervention on the installation requiring the opening of the circuit
 - ➔ when the liquid indicator (VCYL or VCYLS) indicates an abnormal humidity content
 - ➔ when the pressure loss measured in the filter drier shell is too great

- ➔ at least once a year as a measure of precaution.
- It is important to regularly monitor the refrigerant's moisture content and condition using sight glasses with CARLY VCYL or VCYLS moisture indicator (refer to chapter 9 or 10).
- For use of various CCY core types in the pollution control and circuit cleaning process after compressor burnout, closely follow the recommendations given to chapter 7.



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Functional features

OADLY.		То	be us	sed w	ith			Use		Filtration		
CARLY References	BDCY	BCY-	BBCY	ACY	BACY	HCYBF	On	On	On		Composition	Features
		HP					suction line	liquid line	oil line	microns		
Felt cores							_	_	_	_	_	
CCY 42 F	Х						Temporary a					For CFC, HCFC, HFC, CO ₂
CCY 48 F				Х			few days			10	Felt	Reinforced filtration
CCY 100 F					Х							
Stainless steel of		-	-	_	-		_	_	_	_	_	
CCY 42 I	Х										Stainless steel	For CFC, HCFC, HFC, CO
CCY 48 I				Х			Permanent			140	mesh cloth and	Filtering
CCY 100 I					Х						screen	
High efficiency		l core	S	_	-		_	_	_	_	_	
CCY 42 HP	Х						Temporary a	Permanent			Chemical	For CFC, HCFC, HFC, CO ₂
CCY 48 HP		Х		Х			few days	until		50	agents	Reinforced drying acid neutralization
CCY 100 HP			Х		Х			saturation			Ũ	acid neutralization
Very hich efficie	ency d	rying	cores		-		_		_	_	_	
PLATINIUM 48		Х		Х			Temporary a few days	Permanent until saturation		50	Chemical agents	For CFC, HCFC, HFC, CO ₂ Optimum drying
Cleaning cores												
CCY 42 N	Х											For CFC, HCFC, HFC, CO ₂ Burnout decontamination,
CCY 48 N		Х		Х			Temporary a few days	Temporary a few days	50	Chemical agents	reinforced drying, reinforced acid neutralization,	
CCY 100 N			Х		Х							wax and resin binding
Oil cores												
CCY 48 HU						Х			Permanent until saturation	30	Filtrating cellulose, glued, pleated	For refrigerating oil filtering

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→ CCY HP / PLATINIUM 48 / CCY N

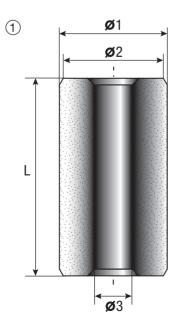
Selection table of drying and cleaning cores

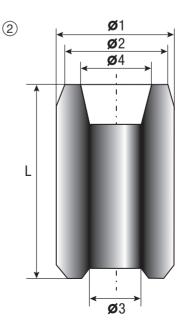
CARLY References	Filtering surface	Volume of desiccation	Dehydratable refrigerant capacity kg of refrigerant ⁽¹⁾							
		products	R22 R407C R407F		R134a R410A		R404A R507		R744 CO ₂	
	Cm ²	CM ³	24 °C	52 °C	24 °C	52 °C	24 °C	52 °C	24 °C	
CCY 42 HP	374	645	47	40	53	43	50	41	29	
CCY 48 HP	420	704	55	48	64	51	60	49	34	
CCY 100 HP	630	1495	110	95	126	101	120	97	67	
PLATINIUM 48	420	704	72	62	83	66	78	64	44	
CCY 42 N	374	645	47	40	53	43	50	41	29	
CCY 48 N	420	704	55	48	64	51	60	49	34	
CCY 100 N	630	1495	110	95	126	101	120	97	67	

⁽¹⁾ Dehydratable refrigerant capacities according to Standard ARI 710-86.

Technical features of drying and cleaning cores

CARLY References	Drowing Nb	Dimensions mm						
	Drawing Nb	Ø1	Ø2	Ø3	Ø4	L		
CCY 42 HP	1	80	74	29	/	148		
CCY 48 HP	2	94	82	45	60	139		
CCY 100 HP	1	121	108	53	/	164		
PLATINIUM 48	2	94	82	45	60	139		
CCY 42 N	1	80	74	29	/	148		
CCY 48 N	2	94	82	45	60	139		
CCY 100 N	1	121	108	53	/	164		





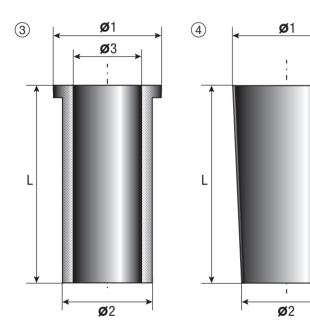


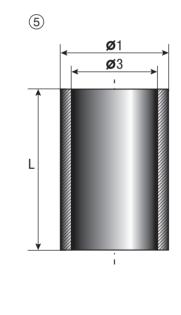
Drying, filtering and cleaning cores

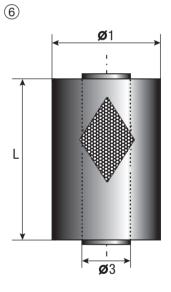
$\rightarrow CCY F / CCY I / CCY HU$

Selection table and technical features of filtering cores

CARLY References		Surface	Dimensions mm					
	Drawing Nb	de filtration cm ²	Ø1	Ø2	Ø3	L		
CCY 42 F	3	329	81	62	42	155		
CCY 48 F	5	420	93	/	75	140		
CCY 100 F	5	630	122	/	105	166		
CCY 42 I	4	348	81	62	/	155		
CCY 48 I	5	420	93	/	/	140		
CCY 100 I	5	630	122	/	/	166		
CCY 48 HU	6	5790	101	/	27	150		







■ Spare parts

CARLY References	Description	Types	Quantity
CY 15555211	End plate gasket	BDCY	1
CY 15555601	End plate gasket	ACY - BCY	1
CY 15555701	End plate gasket	BACY - BBCY	1

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Weights and packaging

CARLY references		veight ^{(g}	Packaging number of pieces	CARLY		veight ^{(g}	Packaging number of pieces
	With packaging	Without packaging		references	With packaging	Without packaging	
CCY 42 HP	0,77	0,68	15	CCY 42 F	0,13	0,12	6
CCY 48 HP	0,90	0,79	15	CCY 48 F	0,26	0,15	15
CCY 100 HP	1,75	1,52	6	CCY 100 F	0,24	0,19	6
PLATINIUM 48	0,90	0,79	15	CCY 42 I	0,11	0,10	6
CCY 42 N	0,62	0,53	15	CCY 48 I	0,21	0,10	15
CCY 48 N	0,81	0,70	15	CCY 100 I	0,24	0,16	6
CCY 100 N	1,58	1,36	6	CCY 48 HU	0,31	0,30	15