

# ***FILCORD***

**Dynamic  
Generation**

Switched MIG/MAG welding installations  
for professional applications



2007-073

2007-217

2570-028

# FILCORD installations for MIG/MAG welding



Selection table

Primary supply	Compact or Separate version	Wire diameter range (steel) recommended	Air or Water cooled version		Weight (power source only)	Welding current					Digital display	Product name
			air	water		100	200	300	400	500		
single phase	compact	0.6 - 0.8 mm	air	-	39 kg	▲					No	<b>FILCORD 171 C</b>
single phase	compact	0.6 - 0.8 mm	air	-	52 kg	▲	▲				Optional	<b>FILCORD 201 C</b>
three phase	compact	0.6 - 1.0 mm	air	-	71 kg	▲					Optional	<b>FILCORD 203 C</b>
single phase	compact	0.8 - 1.2 mm	air	-	86 kg	▲	▲				Optional	<b>FILCORD 251 C</b>
single phase	separate	0.8 - 1.2 mm	air	-	86 kg	▲	▲				Yes	<b>FILCORD 251 S</b>
three phase	compact	0.8 - 1.2 mm	air	-	80 kg	▲	▲				Optional	<b>FILCORD 253 C</b>
three phase	compact	0.8 - 1.2 mm	air	-	96 kg	▲	▲				Yes	<b>FILCORD 303 C</b>
three phase	separate	0.8 - 1.2 mm	air	-	81 kg	▲	▲				Yes	<b>FILCORD 303 S</b>
three phase	compact	0.8 - 1.2 mm	air	-	116 kg	▲	▲				Yes	<b>FILCORD 353 C</b>
three phase	separate	0.8 - 1.2 mm	air	-	100 kg	▲	▲				Yes	<b>FILCORD 353 S</b>
three phase	separate	0.8 - 1.6 mm	air	water optional	135 kg	▲	▲				Yes	<b>FILCORD 453 S</b>



Legend:

▲ I mini at 35% (40°) I maxi ▲

## Easy to use

FILCORD installations have characteristics which make them easy to use. Using digital control of the wire speed, the machine always supplies the correct quantity of wire at the appropriate speed. Furthermore, the priming system is extremely powerful thanks to the “soft start” and “burn back” systems. The digital parameter display lets you know immediately and permanently whether you are welding under the best conditions.

## Welding performance

Units in the FILCORD range have been developed to bring maximum performance in your applications.

You will obtain an extremely stable arc thanks to the self-regulation of the wire feed speed, the 4-rollers feeding system and voltage regulation. The parameters can be very easily adjusted directly on the front panel of the generator.



Five reasons to choose an installation from the FILCORD range: FILCORD is a new generation of MIG/MAG welding installations for welding professionals. The products from the FILCORD range will give you amazing welding performance at a reasonable price. All the experience of Air Liquide Welding is available to you in these installations so you can be sure of having made the right choice.



### The choice is yours

We have built a range of products to satisfy all possible situations. Our large range of single-phase or three-phase models, portable, with integral or separate wire feeder, enable you to choose the product best suited to your work setup. A large choice of additional options are also available to meet your requirements as closely as possible.

### A good investment

FILCORD is the best investment you could make. FILCORD installations enable you to improve your productivity at a price which suits you. In addition, the excellent reliability of these machines enables you to work without worrying about breakdowns.

The result is simple with FILCORD, you have a lot more for less cost



### Safety

Welder safety is a priority for Air Liquide Welding and we make no compromises in this regard. FILCORD installations allow you to work under the safest conditions. Our “security requirement” is initially expressed by compliance with the strictest European standards and the low open-circuit voltage of FILCORD generators.



# The FILCORD C welders: compactness and



## Basic equipment

- Single phase or three phases welding machine,
- Digital display optional or standard depending on model,
- Reverse polarity,
- Adjustable self position (1 to 3 depending on model),
- 2T/4T,
- Primary cable 3 meters long,
- Fitted ground cable 3 meters long with clamp,
- K300 adaptor (except Filcord 171 C).



## Technical data

		FILCORD 171 C	FILCORD 201 C
Primary	Power supply	230 V - 1ph	230 V - 1ph
	Frequency	50 - 60 Hz	50 Hz
	Consumption at max. current	24 A	32 A
Secondary	No-load voltage	18 - 32 V	18 - 35 V
	Welding current	30 - 170 A	35 - 180 A
Duty cycle at 40 °C	at 100 %	60 A	85 A
	at 60 %	75 A	110 A
	at 35 %	140 A (18 %)	180 A (20 %)
Wires diameter	Steel	0.6-1.0 mm	0.6-1.0 mm
	Stainless steel	0.8-1.0 mm	0.8-1.0 mm
	Flux cored wire	1.0 mm	1.0 mm
	Aluminium	0.8-1.0 mm	0.8-1.0 mm
Protection index		IP 21	IP 23
Standards			
Insulation classification			
Dimensional characteristics	Dimensions (W x H x L)	440 x 670 x 750 mm	500 x 870 x 950 mm
	Net weight	39 kg	52 kg
Wire feed		2 rollers	
Digital display		No	
Number of self position		1	1
Reverse polarity		Yes	Yes

## To order

Tailor-made	Power source only with integrated wire feeder		W 000 263 762	W 000 263 763	
	Package*		W 000 266 576	-	
	Torch (air cooled)	WELDLINE	WMT 15 A		
		length 3 m	W 000 010 600		
		length 4 m	W 000 010 601		
	Pressure regulator - flowmeter				

\* For French market.



2002-001



## COMPACT VERSIONS: FILCORD C

FILCORD 203 C	FILCORD 251 C	FILCORD 253 C	FILCORD 303 C	FILCORD 353 C
230 / 400 V - 3ph	230 V - 1ph		230 / 400 V - 3ph	
50 Hz				
19 - 11 A	54 A	27 - 16 A	33 - 19 A	41.5 - 24 A
18 - 35 V	20 - 53 V	18 - 40 V	18 - 45 V	18 - 45 V
27 - 200 A	32 - 250 A	35 - 250 A	35 - 300 A	35 - 350 A
110 A	140 A	140 A	180 A	210 A
140 A	180 A	170 A	230 A	270 A
200 A (30 %)	250 A (30 %)	250 A (30 %)	300 A	350 A
0.6-1.0 mm	0.8-1.2 mm	0.8-1.2 mm	0.8-1.2 mm	0.8-1.2 mm
0.8-1.0 mm	0.8-1.0 mm	0.8-1.0 mm	0.8-1.2 mm	0.8-1.2 mm
1.0 mm	1.0 mm	1.0 mm	1.0-1.2 mm	1.0-1.2 mm
0.8-1.0 mm	0.8-1.0 mm	0.8-1.0 mm	1.0-1.2 mm	1.0-1.2 mm
IP 23				
EN 60974-1; -10				
H				
500 x 870 x 950 mm	500 x 870 x 950 mm	500 x 870 x 950 mm	620 x 940 x 1.000 mm	620 x 940 x 1.000 mm
71 kg	86 kg	80 kg	96 kg	116 kg
4 rollers				
Option W 000 264 869			Yes	
1	2		3	
Yes				
W 000 263 765	W 000 263 764	W 000 263 766	W 000 263 767	W 000 263 768
W 000 267 147	-	W 000 267 148	W 000 267 149	W 000 267 150
WMT 25 A			WMT 36 A	
W 000 010 602			W 000 010 605	
W 000 010 603			W 000 010 606	
Consult us				

# The FILCORD S welders: from 250 amps to



## Basic equipment

- Single phase or three phases welding machine,
- Digital display standard on wire feeder,
- Adjustable self position (1 to 3 depending on model),
- 2T/4T,
- Primary cable 3 meters long,
- Fitted ground cable 3 meters long with clamp,
- K300 adaptor,
- 4 rollers with ducted harness 5 or 10 meters length,
- Water cooled optional depending on model.



## Technical data

		<b>FILCORD 251 S</b>		
<b>Primary</b>	<b>Power supply</b>	230 V - 1ph		
	<b>Frequency</b>	50 Hz		
	<b>Consumption at max. current</b>	54 A		
<b>Secondary</b>	<b>No-load voltage</b>	20 - 53 V		
	<b>Welding current</b>	32 -250 A		
	<b>Duty cycle at 40 °C</b>	<b>at 100 %</b>	140 A	
		<b>at 60 %</b>	180 A	
		<b>at 35 %</b>	250 A (30 %)	
<b>Wires diameter</b>	<b>Steel</b>	0.8-1.2 mm		
	<b>Stainless steel</b>	0.8-1.0 mm		
	<b>Flux cored wire</b>	1.0 mm		
	<b>Aluminium</b>	0.8-1.0 mm		
<b>Protection index</b>		IP 23		
<b>Standards</b>		EN 60974-1		
<b>Insulation classification</b>		H		
<b>Dimensional characteristics</b>	<b>Dimensions (W x H x L)</b>	500 x 870 x 950 mm		
	<b>Net weight (power source only)</b>	86 kg		
<b>Wire feed</b>		4 rollers		
<b>Digital display</b>		Yes (on wire feeder)		
<b>Number of self position</b>		1		
<b>Reverse polarity</b>		No		

## To order

<b>Tailor-made installation</b>		<b>Power source only</b>	W 000 055 227
<b>Air cooled version</b>	<b>Separate air cooled wire feeder</b>	<b>DV 405 F including 5 m harness</b>	W 000 263 774
		<b>DV 410 F including 10 m harness</b>	W 000 263 775
	<b>Torch (air cooled)</b>	<b>WELDLINE</b>	WMT 25 A
		<b>length 3 m</b>	W 000 010 602
		<b>length 4 m</b>	W 000 010 603
<b>Water cooled version</b>	<b>Separate water cooled wire feeder</b>	<b>DV 400 FW + 5 m harness</b>	N/A
		<b>DV 400 FW + 10 m harness</b>	N/A
	<b>Cooling unit</b>		N/A
	<b>Torch (water cooled)</b>	<b>WELDLINE</b>	-
<b>length 3 m</b>		-	
		<b>length 4 m</b>	-
<b>Pressure regulator - flowmeter</b>			consult us

# 450 amps



2007-211



2007-080F



2007-217

## SEPARATE VERSIONS: FILCORD S

FILCORD 303 S	FILCORD 353 S (W)	FILCORD 453 S (W)
230 / 400 V - 3ph	230 / 400 V - 3ph	230 / 400 V - 3ph
	50 Hz	
34 - 19.5 A	41.5 - 24 A	64 - 37 A
18 - 42 V	18 - 45 V	19 - 54 V
35 - 300 A	35 - 350 A	35 - 450 A
180 A	210 A	270 A
230 A	270 A	345 A
300 A	350 A	450 A
0.8-1.2 mm	0.8-1.2 mm	0.8-1.6 mm
0.8-1.2 mm	0.8-1.2 mm	0.8-1.6 mm
1.0-1.2 mm	1.0-1.2 mm	1.0-1.6 mm
0.8-1.2 mm	1.0-1.2 mm	1.0-1.2 mm
	IP 23	
	EN 60974-1	
	H	
500 x 865 x 900 mm	500 x 865 x 900 mm	610 x 915 x 1.030 mm
81 kg	100 kg	135 kg
	4 rollers	
	Yes (on wire feeder)	
1		3
	No	
W 000 263 769	W 000 263 770	W 000 263 771
	W 000 263 774	
	W 000 263 775	
	WMT 36 A	
	W 000 010 605	
	W 000 010 606	
N/A	-	W000 262 181 + W 000 262 342
N/A	-	W000 262 181 + W 000 262 343
N/A	-	W 000 262 188
-	-	WMT 500 W
-	-	W 000 010 608
-	-	W 000 010 609
	consult us	

# Advantages of the FILCORD range



## Dynamic generation

This line of FILCORD welders features innovative technology, quality components, controlled production, experience and design. Dynamic generation stands for versatile and advanced welding machines and systems that can be custom adapted to all specific requirements in the professional market.

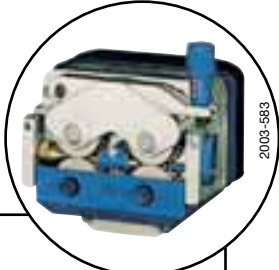
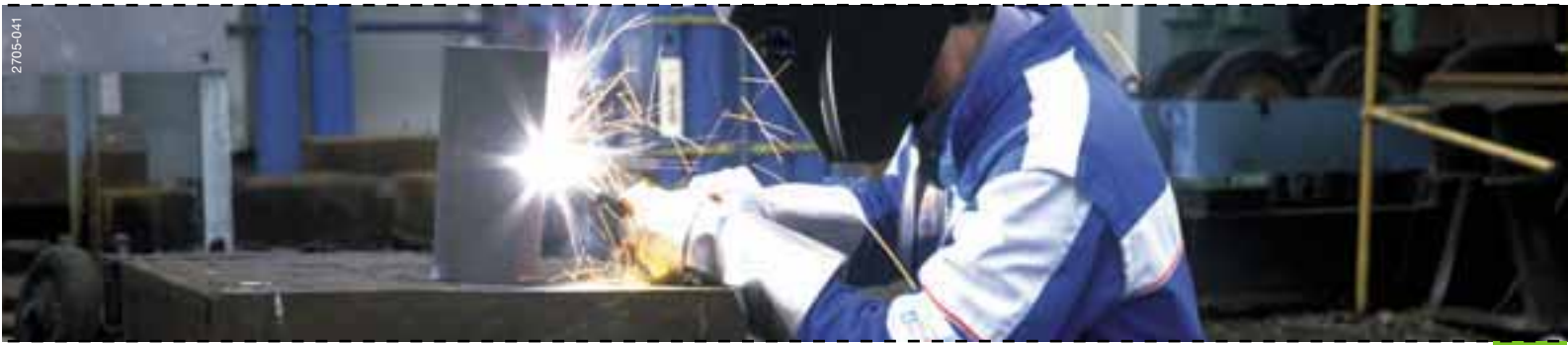


## The power source

- Compact and light due to the dynamically self-adjusting power transformer technology,
- Large and sturdy rear wheels to improve stability during loading or transporting the gas cylinder,
- Single transport handle to simplify moving the machine around when fully equipped,
- Ergonomic lower cylinder support for easy cylinder installation,
- Upper cylinder support designed with welding torch rest,
- Large wire speed adjustment knob that makes it easy to adjust operating parameters,
- Self ventilated electronic control unit protected by a metal cover,
- Self protected safety switch,
- Safety micro switch that interrupts power to the geared motor when opening the coil compartment (Compact versions),
- Inclined cover to reduce water infiltration when the system is used outdoors,
- Large hatchway coil compartment to facilitate loading and unloading wire coil,
- Inclined coil carrying reel to maintain coil in place while welding,
- Snap closure ABS coil compartment hatchway to eliminate vibration during welding (Compact version),
- Accessory compartment to store wear parts inside the coil compartment (Compact versions),
- Digital display available - standard or option, on power source or on feeder depending on model (except FILCORD 171 C),
- Choice of number of self positions depending on model (1 to 3 positions),
- Location of vents to maximize cooling of the unit.

## Pivot foot (Separate version S only)

- Allows the feeder to be stored on the power source or for transport, or to follow operator movement while welding,
- Large in diameter to allow easy installation or removal of the wire feeder,
- Well adjusted for ease of operation when pivoting the feeder during welding.



### Wire feeder

- Available with 2 lengths of harness, 5 or 10 meters in both air cooled or water cooled versions,
- Large handle for easily transporting the feeder,
- Integrated wheels for easy moving of the feeder when on ground,
- Integrated digital display of welding parameters (amps / volts),
- Inclined coil carrying reel to maintain coil in place while welding,
- Safety micro switch that interrupts power to the geared motor when opening the coil compartment,
- Snap closure ABS coil compartment hatchway to eliminate vibration during welding,
- Inclined panel to adjust parameters with electronic adjustment of wire speed,
- 4 rollers mounting plate (except FILCORD 171 C) to provide exceptional wire feeding consistency,
- Mounting plate with self-adjusting pressure idle rollers to improve feeding quality and avoid unevenness.

Separate air cooled wire feeder	DV 405 F including 5 m harness	W 000 263 774
	DV 410 F including 10 m harness	W 000 263 775
Separate water cooled wire feeder	DV 400 FW including 5 m harness	W000 262 181 + W 000 262 342
	DV 400 FW including 10 m harness	W000 262 181 + W 000 262 343
	+ cooling unit	W 000 262 188



### Optional water cooling unit (FILCORD 453 S)

Cat no.: W 000 262 188

- Complete torch cooling unit with transport handle and gauge,
- Easy and quick mounting on FILCORD rear gas cylinder rack,
- Tank refill ideally located to facilitate refilling,
- Side window for easy access to fluid levels,
- Self priming high pressure piston pump,
- Cooling radiator with high level heat exchange and direct ventilation by the power source.

# Front panel

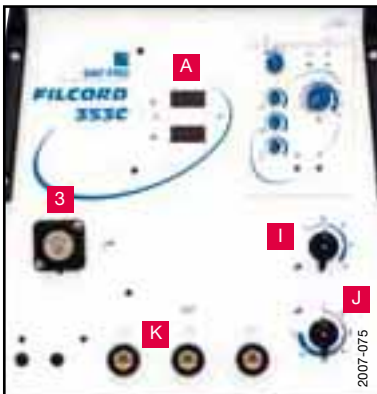


## FILCORD 171 C



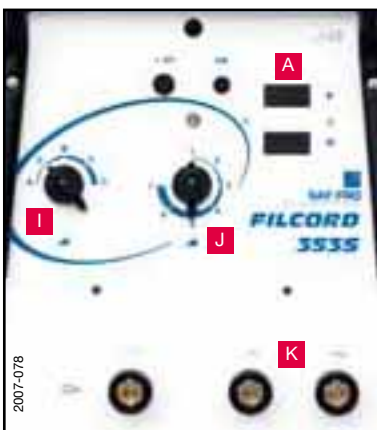
- 1** Transformer temperature monitoring indicator light
- 2** Step time potentiometer (if used for continuous welding, potentiometer in “timer off” position)
- 3** Torch connector, “Euro” type
- 4** Voltage switch (used to adjust the voltage)
- 5** Wire speed regulation potentiometer (carries out current calibration)
- 6** Primary power supply cable
- 7** Ground cable with its clamp

## FILCORD C

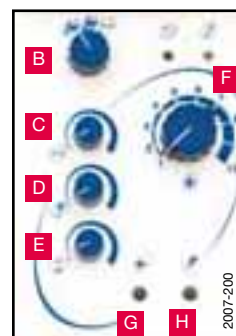
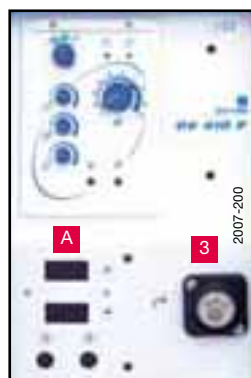


- A** Digital Volt/Ampere display
  - Shows the parameters before and after welding.
  - Facilitates parameter setting.
- B** Welding cycle selector
  - 2T: pressing the trigger activates the arc, releasing it activates the end of the cycle.
  - 4T: pressing the trigger starts the cycle, the trigger can be released. Pressing it again stops the cycle.
  - Spot weld: supplies a welding current for a given time.
- 3** Torch connector
- C** Step time
  - Used to set the spot welding time.
- D** Priming speed
  - Sets the wire run-up speed which improves arc striking.
- E** Anti-sticking
  - Adjusts the length of the “burnt” wire at the end of welding. This function avoids the wire sticking to the workpiece.
- F** Wire speed potentiometer
  - Allow continuous adjustment of the wire feed speed.
- G** Wire test
  - Checks the wire feed mechanism is working properly.
- H** Test gas
  - Used to check the gas flow.
- I** Switch
  - Switch on and pre-adjustment of the welding voltage.
- J** Voltage selector switch
  - Allows the voltage to the terminals of the welding circuit to be finely adjusted.
- K** Grounding cable terminals:
  - On small inductance coil: dynamic and penetrating arc
  - On large inductance coil: soft arc, damp cable.

## FILCORD S



## WIRE FEEDER DV 410 F







# Torches, options and wear parts



## Wire feeder parts

	Ø 0.6 mm	Ø 0.8 mm	Ø 1.0 mm	Ø 1.2 mm	Ø 1.4 mm	Ø 1.6 mm
<b>Specific to FILCORD 171 C</b>						
Rollers for steel and stainless steel wires	W 000 232 110		W 000 232 112	-	-	-
Entry wire guide	W 000 233 472					
<b>Other models of FILCORD</b>						
Entry wire guide	W 000 233 472					
Rollers for steel and stainless steel wires	W 000 050 096	W 000 050 097	W 000 050 098	W 000 050 099	-	W 000 218 767
Rollers for flux cored wires	-	-	W 000 264 870		W 000 265 883	
Rollers for aluminium wires	-	W 000 050 100	W 000 050 101	W 000 050 102	-	-

## WELDLINE torches

Air cooled torches					
Torche name		Duty cycle at 60 %	Cat. no.		Max wire Ø
WMT 15A	3 m	180 A	W 000 010 600		1.0 mm
	4 m		W 000 010 601		
WMT 25A	3 m	230 A	W 000 010 602		1.2 mm
	4 m		W 000 010 603		
	5 m		W 000 010 604		
WMT 36A	3 m	340 A	W 000 010 605		1.6 mm
	4 m		W 000 010 606		
	5 m		W 000 010 607		
Water cooled torches					
WMT 500W	3 m	500 A	W 000 010 608		1.6 mm
	4 m		W 000 010 609		
	5 m		W 000 010 610		

## Torch arm rest

2 models in the range

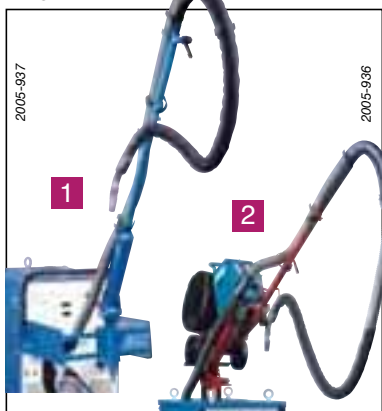
**1** for FILCORD Compact version :

W 000 261 845

**2** for FILCORD Separate version :

W 000 261 846

Arm adjustable up to 2.5 meters length.



## Chameleon 3F & Chameleon 3V self darkening helmets.

CHAMELEON 3F and 3V helmets are self darkening masks equipped with a fixed liquid crystal cell for the F type (DIN 3/11), and a variable one for the V type (DIN 4/9-13). Very light, this high technology helmets are sold with an adjustable headgear.

<p><b>Chameleon 3F</b> Type fixed cell DIN 3/11</p>		W 000 261 351
<p><b>Chameleon 3V</b> Type variable cell DIN 4/9-13</p>		W 000 261 352



## Contacts

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