

EG-Konformitätserklärung

im Sinne der EG-Richtlinie 2006/42/EG über Maschinen

Name und Anschrift des Herstellers

BlitzRotary GmbH
Hüfing Str.55
78199 Bräunlingen, Germany

		Typ : MEDICUS D 400 / 250
Fabrik-Nr.: 82631	Überdruck: 7 bar	
Baujahr: 2017	Ansaugleistung: 400 l/min	
Stufen: 1	Drehzahl: 1400 U/min	
Motor: 2 x 1,5 KW		
BlitzRotary GmbH · Hüfing Strasse 55 · 78199 Bräunlingen		

Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde; vom Endnutzer nachträglich angebrachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt. Die Erklärung verliert ihre Gültigkeit, wenn das Produkt ohne Zustimmung umgebaut oder verändert wird.

Hiermit erklären wir, dass die nachstehend beschriebene Maschine

Produktbezeichnung **Kolbenkompressor**

Serien- / Typenbezeichnung

VARIS	VDZ; VDZH; VDZS; VDZHS; VDZD; VDZHD; VGZ; VGZH; VZ; VZH
VERSA	DZ; DZH; DZS; DZHS; GZ; GZH; DZHP; GZHP; HV; NV; DZNT; DZNDT; GZNT; GKTE; GKTZ; GKTZH
TWIN	Airmobil; Airstation; Hobby; Maximat; Maximat Pro; Kitty II; Whisper; Medicus; VX DKD; DET; DEDT; GET; BKE; BKZ; BKES; GKE; GKZ
FORMULA	28M; 36M; 57M; 38H; 52H; 65H; 38V; 52V; 65V
TOURING	GT30H; GT42H; GT50H; GT32V; GT42V; GT50V;

Maschinen- / Seriennummer

Baujahr :

allen einschlägigen Bestimmungen der Maschinenrichtlinie 2006/42/EG entspricht.

Die Maschine entspricht zusätzlich den Bestimmungen der Richtlinien 2004/108/EG über elektromagnetische Verträglichkeit und 2006/95/EG über elektrische Betriebsmittel EG (Schutzziele wurden gemäß Anhang I, Nr. 1.5.1 der Maschinenrichtlinie 2006/42/EG eingehalten).

Die Maschine entspricht zusätzlich den Bestimmungen 2009/105/EG über einfache Druckbehälter.

Angewandte harmonisierte Normen

EN 1012-1 : 2010	Kompressoren und Vakuumpumpen - Sicherheitsanforderungen
EN 60204-1: 2006+A1:2009	Sicherheit von Maschinen - Elektrische Ausrüstungen von Maschinen
EN ISO 12100:2010	Sicherheit von Maschinen - Grundbegriffe

Angewandte sonstige technische Normen und Spezifikationen

Bevollmächtigter für die Zusammenstellung der relevanten technischen Unterlagen:

BlitzRotary GmbH; Hüfing Str. 55, 78199 Bräunlingen

Ort : Bräunlingen

Datum : 19.03.2013


Frank Scherer
Geschäftsführer / Managing Director



16 bar
operating pressure

60 to 2.760 Nm³/h
volume flow rate

3/8" to 3"
connections

1,5 to 65 °C
operating temperature range

RAL 5012
standard colour

DESCRIPTION

AF filters are designed for protection of the downstream compressed air system and equipment against defects and other failures.

They ensure high efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems up to 16 bar. For any other technical gas please contact producer or your local distributor.

Required compressed air quality according to standard ISO 8571-1 can be achieved with 9 different grades of filter elements (B, P, R, M, S, A, A², H² and MS²).

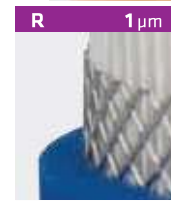
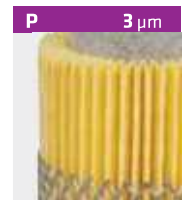
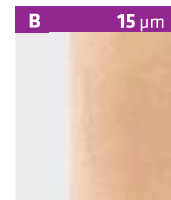
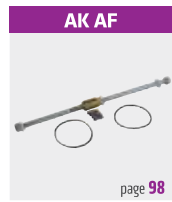
Optional internal and external condensate drains should be used for efficient condensate draining from filter housing.

APPLICATIONS

- General industrial applications
- Automotive
- Electronics
- Food and beverage
- Chemical
- Petrochemical
- Plastics
- Paint

AF SERIES

ALUMINIUM COMPRESSED AIR FILTERS





TECHNICAL DATA										FILTER ELEMENTS								
Filter housing size	Pipe size	Max. oper. press. [bar/psi]	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]				Mass kg	B sintered 15 µm	P prefilter 3 µm	R prefilter 1 µm	M microfilter 0,1 µm	S microfilter 0,01 µm	A activated carbon	A ⁴⁾ adsorption (act. carbon)	H ⁴⁾ catalyst (hopcalite)	MS ⁴⁾ molecular sieve
	inch		Nm ³ /h	scfm	A	B	C	D										
AF 0056	3/8"	16/232	60	35	192	88	25	60	0,6	06050 B15	06050 P	06050 R	06050 M	06050 S	06050 A	-	-	-
AF 0076	1/2"	16/232	78	46	192	88	25	60	0,6	07050 B15	07050 P	07050 R	07050 M	07050 S	07050 A	07050 A ²⁾	07050 H ²⁾	07050 MS ²⁾
AF 0106	3/4"	16/232	120	70	262	88	25	80	0,7	14050 B15	14050 P	14050 R	14050 M	14050 S	14050 A	14050 A ²⁾	14050 H ²⁾	14050 MS ²⁾
AF 0186	1"	16/232	198	116	264	125	39	100	1,2	12075 B15	12075 P	12075 R	12075 M	12075 S	12075 A	12075 A ²⁾	12075 H ²⁾	12075 MS ²⁾
AF 0306	1"	16/232	335	197	364	125	39	120	1,6	22075 B15	22075 P	22075 R	22075 M	22075 S	22075 A	22075 A ²⁾	22075 H ²⁾	22075 MS ²⁾
AF 0476	1 1/2"	16/232	510	300	464	125	39	140	1,9	32075 B15	32075 P	32075 R	32075 M	32075 S	32075 A	32075 A ²⁾	32075 H ²⁾	32075 MS ²⁾
AF 0706	1 1/2"	16/232	780	459	644	125	39	160	2,6	50075 B15	50075 P	50075 R	50075 M	50075 S	50075 A	50075 A ²⁾	50075 H ²⁾	50075 MS ²⁾
AF 0946	2"	16/232	1000	588	696	164	50	520	5,7	51090 B15	51090 P	51090 R	51090 M	51090 S	51090 A	-	-	-
AF 1506	2"	16/232	1500	882	943	164	50	770	7,6	76090 B15	76090 P	76090 R	76090 M	76090 S	76090 A	-	-	-
AF 1756	2 1/2"	16/232	1680	990	943	164	50	770	7,3	76090 B15	76090 P	76090 R	76090 M	76090 S	76090 A	-	-	-
AF 2006	3"	16/232	2160	1270	801	242	60	630	14,1	51140 B15	51140 P	51140 R	51140 M	51140 S	51140 A	-	-	-
AF 2406	3"	16/232	2760	1620	998	242	60	780	16,7	75140 B15	75140 P	75140 R	75140 M	75140 S	75140 A	-	-	-
	quality class - solids (ISO 8573-1)	7	6	3	2	1	1 ³⁾	1 ³⁾	1 ³⁾	1								
	residual oil content [mg/m ³]	-	-	-	<0,1	<0,01	<0,005	<0,005	-	-								
	quality class - oils (ISO 8573-1)	-	-	-	2	1	1	0/1	-	-								
	pressure drop - new element [mbar / psi]	20 / 0,290	10 / 0,145	20 / 0,290	50 / 0,725	80 / 1,160	60 / 0,870	see spec.	see spec.	< 50 / 0,725								
	change filter cartridge at pressure drop [mbar / psi]	¹⁾	350 / 5,07	350 / 5,07	350 / 5,07	350 / 5,07	6 months ²⁾	6 months ²⁾	6 months ²⁾									
	filter material	sintered brass	acrylic fibres, cellulose	borosilicate micro fibres			borosilicate micro fibres											
	pleated version	-	✓	✓	✓	✓	-	✓	✓	✓								
	wrapped version	-	-	-	-	-	✓	-	-	-								
	sintered version	✓	-	-	-	-	-	-	-	-								
	min. operating temperature (°C / °F)	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35	1,5 / 35								
max. operating temperature (°C / °F)	65 / 149	65 / 149	65 / 149	65 / 149	65 / 149	45 / 113	45 / 113	45 / 113	45 / 113									

CORRECTION FACTORS																
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	
Correction factor	0,38	0,50	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	

¹⁾ "B" filter element can be cleaned with ultrasonic bath or with back flushing. Intervals of cleaning depends of application. If necessary replace filter element with new one.
²⁾ Filter elements "A, A²⁾, H²⁾", must be changed periodically to suit application, but at least every 6 months. Activated carbon filters must not operate in oil saturated conditions.
³⁾ Valid if "S" filter cartridge is installed upstream.
⁴⁾ For elements A²⁾, H²⁾ and MS²⁾ it is necessary to reduce the flow according to technical data sheet specification.



EU DECLARATION OF CONFORMITY

Original declaration

SMC Corporation

4-14-1 Soto-Kanda, Chiyoda-ku, Tokyo 101-0021 Japan

declares under its sole responsibility, that the following equipment:

Refrigerated Air Dryers

IDFA3E, 4E, 6E, 8E, 11E, 15E, 15E1, 22E, 37E, 55E, 75E, 100F, 125F, 150F Series

Serial No.: VU0001 onwards

is in conformity with the relevant Union harmonisation legislation and has been demonstrated to fulfil the requirements with reference to the harmonised standard(s) as listed below

Directive	Requirements	Harmonised standards
Machinery Directive 2006/42/EC	All applicable Essential Health and Safety Requirements of Annex I	EN / ISO 12100:2010 EN 60204-1:2006 + A1:2009
EMC Directive 2014/30/EU	Essential requirements set out in Annex I	EN 61000-6-2:2005 EN 61000-6-4:2007 + A1:2011 EN 61000-3-2:2006 + A2:2009 EN 61000-3-3:2008
RoHS Directive 2011/65/EU	Restriction of substances as set out in Annex II	EN50581:2012

Name and address of the person authorised to compile the technical file:

Mr. G. Berakoetxea, Executive Officer, SMC European Zone,
SMC España, S.A., Zuazobidea 14, 01015 Vitoria, Spain

Importer/Distributor in EU and EFTA:

Country	Company	Telephone	Address
Austria	SMC Pneumatik GmbH (Austria)	(43) 2262-62280	Girakstrasse 8, AT-2100 Korneuburg
Belgium	SMC Pneumatics N.V./S.A.	(32) 3-355-1464	Nijverheidsstraat 20, B-2160 Wommelgem
Bulgaria	SMC Industrial Automation Bulgaria EOOD	(359) 2 9744492	Business Park Sofia, Building 8-6th Floor, BG-1715 Sofia
Croatia	SMC Industrijska Automatika d.o.o.	(385) 1 370 72 88	Zagrebačka Avenija 104, 10 000 Zagreb
Czech Republic	SMC Industrial Automation CZ s.r.o.	(420) 541-424-611	Hudcova 78a CZ-61200 Brno
Denmark	SMC Pneumatik A/S	(45) 70 25 29 00	Egeskovvej 1, DK-8700 Horsens
Estonia	SMC Pneumatics Estonia OÜ	(372) 651-0370	Laki 12, EE-10621 Tallinn
Finland	SMC Pneumatikka Finland Oy	(358) 207 513 513	PL72, Tiistinniityntie 4, SF-02031 Espoo
France	SMC France	(33) 1-6476-1000	1 Boulevard de Strasbourg, Parc Gustave Eiffel, Bussy Saint Georges, F-77607, Marne La Vallee, Cedex 3
Germany	SMC Deutschland GmbH	(49) 6103-402-0	Boschring 13-15, D-63329 Egelsbach
Greece	SMC Hellas E.P.E	(30) 210-2717265	Anagenniseos 7-9 - P.C. 14342, Nea Philadelphia, Athens
Hungary	SMC Hungary Ipari Automatizálási Kft.	(36) 23-511-390	Torbágy u. 19, HU-2045 Törökbálint
Ireland	SMC Pneumatics (Ireland) Ltd.	(353) 1-403-9000	2002 Citywest Business Campus, Naas Road, Saggart, Co. Dublin
Italy	SMC Italia S.p.A.	(39) 02-9271-1	Via Garibaldi, 62, I-20061 Carugate, Milano
Latvia	SMC Pneumatics Latvia SIA	(371)781-77-00	Dzelzavas str. 120g, Riga, LV-1021
Lithuania	SMC Pneumatics Lietuva, UAB	(370)5-264-81-26	Oslo g.1, LT-04123 Vilnius
Netherlands	SMC Pneumatics B.V.	(31) 20-531-8888	De Ruyterkade 120, NL-1011 AB Amsterdam
Norway	SMC Pneumatics Norway AS	(47) 67-12-90-20	Vollsvveien 13c, Granfoss Næringspark, N-1366 Lysaker
Poland	SMC Industrial Automation Polska Sp. zo.o	(48) 22 211 96 00	ul. Poloneza 89, PL-02-826 Warszawa
Portugal	SMC Sucursal Portugal, S.A.	(351) 945-184 100	Rua De Eng Ferrerira Dias 452 4100-246, Porto
Romania	SMC Romania S.r.l.	(40)21-3205111	Str. Frunzei, Nr.29, Sector 2 Bucharest
Slovakia	SMC Priemyselna Automatizacia, Spol s.r.o.	(421) 41-321321-1	Fantranská 1223, Teplicka nad vahom, 01301
Slovenia	SMC Industrijska Avtomatika d.o.o.	(386) 7388 5412	Mirska cesta 7, SLO-8210 Trebnje
Spain	SMC España, S.A.	(34) 945-184-100	Zuazobidea 14, 01015 Vitoria
Sweden	SMC Pneumatics Sweden AB	(46) 8-603-12-00	Ekhagsvägen 29-31, SE-14171 Segeltorp
Switzerland	SMC Pneumatik AG	(41) 052-396-3131	Dorfstrasse 7, Postfach 117, CH-8484, Weisslingen
United Kingdom	SMC Pneumatics (U.K.) Ltd.	(44) 1908-563888	Vincent Avenue, Crownhill, Milton Keynes, Bucks MK8 0AN

Tokyo, 22nd July 2017

Hiroyuki Sakama

General Manager

Product Development Division -V1

Refrigerated Air Dryer

Series IDFA



- **High efficiency heat exchanger**
- **Ozone friendly refrigerants**
- **Conforms to stringent ISO8573-1 standards**

Series IDFA Refrigerated Air Dryer

High performance, reliable and trouble free com

- State of the art design ensures a constant 3°C pressure dew point.
- Environmentally ozone friendly HFC134a and HFC407C refrigerant.
- Simple control system, incorporating an easy to read evaporator gauge.
- Stainless steel heat exchanger providing long life and low pressure drops.
- Compact design for ease of installation.
- ø10 mm One-touch condensate drain port.

Standard Specifications

Model	Operating range			Power supply voltage	Power consumption (W)	Air port connections	Refrigerant	Weight (kg)
	Inlet air pressure (bar)	Inlet air temperature (°C)	Ambient temperature (°C)					
IDFA3E-23	1.5 to 10	5 to 50	2 to 40 (Relative humidity of 85% or less)	Single Phase 230 VAC 50Hz	180	Rc 3/8	HFC134a	18
IDFA4E-23						Rc1/2		22
IDFA6E-23-K	1.5 to 16				Rc 3/4	23		
IDFA8E-23-K						27		
IDFA11E-23-K						28		
IDFA15E-23-K						46		
IDFA22E-23-K						Rc 1		54
IDFA37E-23-K								R 1 1/2
								HFC407C

Note) Thread adapters to convert Rc thread to R thread are included with IDFA3E to IDFA15E.

Nominal Air Flow Rate [m³/h (ANR)]

Model	ISO 8573.1 Water vapour class		
	4 (3°C Pressure dew point)	5 (7°C Pressure dew point)	6 (10°C Pressure dew point)
IDFA3E-23	12	15	17
IDFA4E-23	24	31	34
IDFA6E-23-K	36	46	50
IDFA8E-23-K	65	83	91
IDFA11E-23-K	80	101	112
IDFA15E-23-K	120	152	168
IDFA22E-23-K	182	231	254
IDFA37E-23-K	273	347	382

Note 1) The standard condition (ANR) is under the conditions of 20°C at atmospheric pressure and relative humidity of 65%.

Note 2) The performance data for pressure dew point is in accordance with the following operating conditions from ISO 7183:

- Inlet air pressure: 7 bar
- Inlet air temperature: 35°C (saturated)
- Cooling air temperature: 25°C

Correction Factors

Inlet air temperature (°C)	5 to 25	30	35	40	45	50
Correction factor A	1.30	1.25	1.00	0.83	0.70	0.60

Ambient temperature (°C)		20	25	30	35	40
Correction factor B	IDFA3E to 11E	1.10	1.00	0.91	0.83	0.79
	IDFA15E to 37E	1.10	1.00	0.97	0.89	0.77

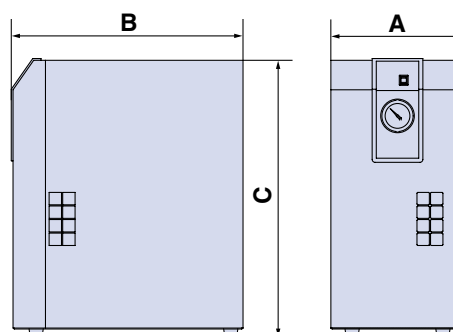
Inlet air pressure (bar)		3	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor C	IDFA3E to 11E	0.80	0.87	0.92	0.96	1.00	1.04	1.07	1.10	1.13	1.16	1.18	1.21	1.23	1.25
	IDFA15E to 37E	0.72	0.81	0.88	0.95	1.00	1.06	1.11	1.16	1.19	1.21	1.23	1.25	1.26	1.27

Corrected air flow rate = Customer's air flow rate/Factor A x Factor B x Factor C.

Select a model with a nominal air flow rate higher than the corrected air flow rate calculated in the formula above.

Dimensions (mm)

Model	A	B	C
IDFA3E-23	226	410	473
IDFA4E-23	270	453	498
IDFA6E-23-K		455	
IDFA8E-23-K		485	568
IDFA11E-23-K	300	603	578
IDFA15E-23-K	290	775	623
IDFA37E-23-K		855	



pressed air treatment from SMC

The new SMC IDFA Series of refrigerated air dryers are the result of over 40 years experience combined with the latest compressed air and refrigeration technology.



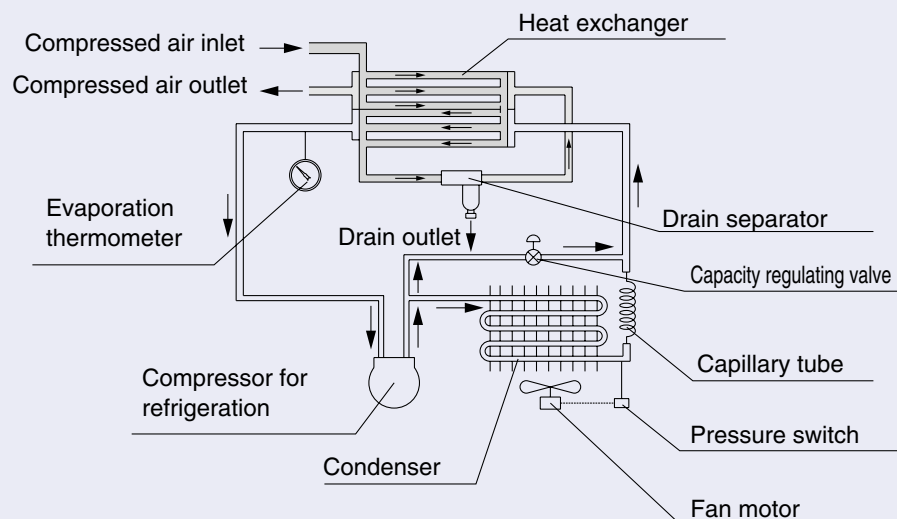
Built to international standards, and backed by SMC's BS EN ISO 9001 quality certification, the IDFA Series has eight standard models with nominal capacities from 12 m³/h to 382 m³/h.



Operation Principle

Saturated compressed air enters the air-to-air heat exchanger, the incoming air is then pre-cooled by the cold air exiting the dryer. The air then passes through the evaporator, where it is further cooled, to a 3°C dew point. As the air cools, the water condenses from a vapour to a liquid which is removed by the automatic drain.

The dry air is then passed back through the air-to-air heat exchanger where it is reheated before leaving the dryer.





Series AFF Main Line Filter

- General purpose 3 micron filter.
- Die-cast aluminium body with chromate treatment.
- Cartridge type element with no screw threads or tie rods, therefore removal and replacement of element is quick and easy.
- Option for differential pressure indicator.
- Option for internal auto-drain.
- Built-in push-to-connect fitting on drain.



Series AMD Micro Mist Separator

- 0.01 micron high efficiency oil removing filter.
- Die-cast aluminium body with chromate treatment.
- Cartridge type element with no screw threads or tie rods, therefore removal and replacement of element is quick and easy.
- Option for differential pressure indicator.
- Option for internal auto-drain.
- Built-in push-to-connect fitting on drain.



Series AMF Odour Removal Filter

- Activated carbon filter.
- Die-cast aluminium body with chromate treatment.
- Cartridge type element with no screw threads or tie rods, therefore removal and replacement of element is quick and easy.
- Two sight glasses are fitted to the housing to give a visual indication of the filter operation and condition.



Series IDG Membrane Air Dryer

- -15°C, -20°C, -40°C and -60°C pressure dew points.
- Option for dew point indicator that confirms air drying at a glance.
- Compact and lightweight.
- Also available with fittings for purge air discharge.
- Discharged air noise reduced with built-in silencer.
- Environmentally friendly (non-freon).
- Power supply not required.
- No vibration or heat discharge.
- Compatible with low dew points.

SMC CORPORATION (Europe)

Austria	☎ +43 226262280	www.smc.at	office@smc.at
Belgium	☎ +32 (0)33551464	www.smc-pneumatics.be	post@smcpneumatics.be
Bulgaria	☎ +359 2 9744492	www.smc.bg	office@smc.bg
Croatia	☎ +385 1 377 66 74	www.smc.hr	office@smc.hr
Czech Republic	☎ +42 0541424611	www.smc.cz	office@smc.cz
Denmark	☎ +45 70252900	www.smc-pneumatik.com	smc@smc-pneumatik.dk
Estonia	☎ +372 (0)6593540	www.smc-pneumatics.ee	smc@smcpneumatics.ee
Finland	☎ +358 207 513513	www.smc.fi	smcfin@smc.fi
France	☎ +33 (0)164761000	www.smc-france.fr	contact@smc-france.fr
Germany	☎ +49 (0)61034020	www.smc-pneumatik.de	info@smc-pneumatik.de
Greece	☎ +30-210-2717265	www.smchellas.gr	sales@smchellas.gr
Hungary	☎ +36 13711343	www.smc.hu	office@smc.hu
Ireland	☎ +353 (0)14039000	www.smc-pneumatics.ie	sales@smcpneumatics.ie
Italy	☎ +39 (0)292711	www.smcitalia.it	mailbox@smcitalia.it
Latvia	☎ +371 (0)7779474	www.smclv.lv	info@smclv.lv
Lithuania	☎ +370 5 264 81 26		
Netherlands	☎ +31 (0)205318888	www.smc-pneumatics.nl	info@smcpneumatics.nl
Norway	☎ +47 67129020	www.smc-norge.no	post@smc-norge.no
Poland	☎ +48 225485085	www.smc.pl	office@smc.pl
Portugal	☎ +351 226108922	www.smces.es	postpt@smc.smces.es
Romania	☎ +40 213205111	www.smcromania.ro	smcromania@smcromania.ro
Russia	☎ +812 1185445	www.smc-pneumatik.ru	marketing@smc-pneumatik.ru
Slovakia	☎ +421 244456725	www.smc.sk	office@smc.sk
Slovenia	☎ +386 73885249	www.smc.si	office@smc.si
Spain	☎ +34 945184100	www.smces.es	post@smc.smces.es
Sweden	☎ +46 (0)86031200	www.smc.nu	post@smcpneumatics.se
Switzerland	☎ +41 (0)523963131	www.smc.ch	info@smc.ch
Turkey	☎ +90 (0)2122211512	www.entek.com.tr	smc-entek@entek.com.tr
UK	☎ +44 (0)8001382930	www.smc-pneumatics.co.uk	sales@smcpneumatics.co.uk

European Marketing Centre ☎ +34 945184100
SMC CORPORATION ☎ +81 0335022740

www.smceu.com
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SMC CORPORATION Akihabara UDX 15F, 4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, JAPAN Phone: 03-5207-8249 FAX: 03-5298-5362



ZERTIFIKAT

Die Zertifizierungsstelle
der TÜV SÜD Management Service GmbH

bescheinigt, dass das Unternehmen

BlitzRotary GmbH

Hüfingerstr. 55 • 78199 Bräunlingen
Deutschland

für den Geltungsbereich

Entwicklung, Herstellung und Vertrieb von
Drucklufttechnik, Fahrzeug-Hebetechnik, Reifenfülltechnik,
Messtechnik, Batterieservicetechnik, Sonderwerkzeuge

Waltersbündt 3 • 77749 Hohberg-Hofweier
Deutschland

für den Geltungsbereich

Herstellung und Vertrieb von
Fahrzeug-Hebetechnik, Reifenwucht-,
Montier- und Messtechnik

ein Qualitätsmanagementsystem
eingeführt hat und anwendet.

Durch ein Audit, Bericht-Nr. **707089175**,
wurde der Nachweis erbracht, dass die Forderungen der

ISO 9001:2015

erfüllt sind.

Dieses Zertifikat ist gültig vom **25.04.2018** bis **24.04.2021**.

Zertifikat-Registrier-Nr.: **12 100 55701 TMS**.

Product Compliance Management
München, 25.04.2018



CERTIFICATE

EN ISO 14001



certifies that the company

BlitzRotary GmbH

D-78199 Bräunlingen

Re the area of applicability:

Development, production and sales of compressed air technology, vehicle lifting technology, tire inflation technology, measurement technology, battery service technology, special tools Complete company

has established
and applies a environment
system according to

EN ISO 14001:2015

The proof was furnished by certification audit and written in
report - no.ÖK 180425po1

Date of the
first certification: **2014-08-27**

Date of the
recertification: **2018-04-25**

Registrations-no.: **205372**

Valid until: **2021-04-24**



ÖKO - ZERT Gerhard Dischke
ACCREDITED THROUGH
EURAS

D-72766 Reutlingen • Grüner Weg 60 • Tel 0049 7121 263 94 53

BUREAU VERITAS
Certification



Certificate

Awarded to

OMEGA AIR d.o.o. Ljubljana

CESTA DOLOMITSKEGA ODREDA 10, 1000 LJUBLJANA, SLOVENIA
and site: PE LOGATEC, Obrtna cona Logatec 20, 1370 Logatec, Slovenia

Bureau Veritas Certification Holding SAS – UK Branch certify that the Management System of the above organization has been audited and found to be in accordance with the requirements of the management system standard detailed below

STANDARD

ISO 9001:2015

SCOPE OF CERTIFICATION

DEVELOPMENT, DESIGN, PRODUCTION, SALES AND SERVICE OF EQUIPMENT AND SYSTEMS FOR COMPRESSED AIR AND OTHER GASES, FILTRATION AND SEPARATION OF GASES AND LIQUIDS

Original certification date: **16/09/2003**

Certification cycle start date: **16/09/2018**

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: **15/09/2021**

Certificate number: **SL22594Q**

Version number: **01** Revision date: **12/09/2018**

Signed on behalf of BV/CH SAS UK Branch

Certification body address: 5th Floor, 66 Prescot Street, London, E1 8HG, United Kingdom
Local office: Linhartova cesta 49a, 1000 Ljubljana, Slovenia

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.

To check this certificate validity please call: + 386 1 47 57 670.



0008



TWIN piston compressor, oil free Medicus D 400/90



DESCRIPTION

TWIN piston compressors from BLITZ offer power capacity and heavy-duty performance at an attractive price. For all compressed air users with high demands and daily application needs.

Trade compressors of the TWIN series are available as oil-lubricated or oil-free models, each either stationary or mobile. The TWIN Aerostation offers a totally economical solution comprising of compressor, refrigerated air dryer, oil water separator and automatic condensate drain.

- **Air aftercooler:** For all TWIN piston compressors efficient after-coolers and intermediate-coolers ensure low air outlet temperatures. This strongly reduces the need for further air processing.
- **2 Stage design:** Almost all the TWIN piston compressors are manufactured with the special 2-stage design. Low thermal and mechanical load leads to much higher efficiency and ca. 25% energy conservation.
- **Electric motors from reputable manufacturers:** TWIN piston compressors are produced to a level of high quality. This includes the application of IP 54 tested electric motors with ISO F-winding. Naturally attention is paid to the sufficient dimensioning – with power reserve just in case.
- **Low compressor speed** TWIN piston compressors: that means large working volume with low compressor speed (in average only 895 rpm for V-belt driven compressors). A guarantor for long lifetime, low wear, quiet-running and high efficiency.
- **Maintenance-free segment valves:** The multi-purpose valve plates for 2-stage compression prove themselves by their long-life and energy-saving efficiency.

SPECIFICATIONS

Noise level with acoustic hood	68 dB(A)
Cylinder / Stages	2 x 2/1
Suction capacity	400 l/min
Free air delivery	250 l/min
Compressor speed	1400 rpm
Power supply	230/50 V/Hz
Weight with acoustic hood	208 kg
Max. operating pressure	7 bar
Motor power	1,5 / 1,5 kW
Dimensions with acoustic hood (W x D x H)	1150 x 720 x 1400 mm
Pressure vessel capacity	90 l
Compressed air connection	3/8 inch

Refrigerated Air Dryer

Series **IDFA□E/F**

For use in Europe, Asia and Oceania



Standard/series IDFA□E

●Power supply voltage: Single-phase 230 VAC (50Hz)

Model	Rated inlet condition	Air flow capacity (m ³ /h [ANR])			Port size
		Outlet air pressure dew point			
		3°C	7°C	10°C	
IDFA3E	35°C 0.7 MPa	12.0	15.0	17.0	Rc 3/8
IDFA4E		24.0	31.0	34.0	Rc 1/2
IDFA6E		36.0	46.0	50.0	Rc 3/4
IDFA8E		65.0	83.0	91.0	
IDFA11E		80.0	101.0	112.0	
IDFA15E		120.0	152.0	168.0	Rc 1
IDFA22E		182.0	231.0	254.0	R 1
IDFA37E		273.0	347.0	382.0	R 1 1/2
IDFA55E		390.0	432.0	510.0	R 2
IDFA75E		660.0	720.0	822.0	

Refrigerant **R134a(HFC)**
R407C(HFC)

Coefficient of destruction for ozone is zero.

Improved corrosion resistance with the use of stainless steel, plate type heat exchanger (IDFA4E to 75E, 100F to 150F)



Large size/Series IDFA□F

●Power supply voltage: Three-phase 380 VAC (50Hz) For Asia and Oceania
Three-phase 400 VAC (50Hz) For Europe

Tolerant of high temperature environment!
Top of its class in the industry for the large air-cooled type
Ambient temperature **45°C** at max.
Inlet air temperature **60°C** at max.

Energy saving design
Exhaust heat reduced by 25% at max.
Ambient temperature increase suppressed.
Employs a heat exchanger made of high corrosion-resistant stainless steel.



Refrigerant **R407C(HFC)**

Coefficient of destruction for ozone is zero.

Model	Rated inlet condition	Outlet air pressure dew point	Air flow capacity (m ³ /h [ANR])	Port size
IDFA100F-38	40°C 0.7 MPa	10°C	960	R 2
IDFA125F-38			1210	R 2 1/2
IDFA150F-38			1500	DIN flange 80
IDFA100F-40	35°C 0.7 MPa	3°C	860	R 2
IDFA125F-40			1100	R 2 1/2
IDFA150F-40			1340	DIN flange 80

HAA
HAW

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IDF
IDU

IDFA

IDFB

IDH

ID

IDG

IDK

AMG

AFF

AM

AMD

AMH

AME

AMF

ZFC

SF

SFD

LLB

AD□

GD

INDEX

1. Standard Products Series IDFA□E



Model	Rated inlet condition	Air flow capacity (m ³ /h [ANR])			Refrigerant	Port size	Page
		Outlet air pressure dew point					
		3°C	7°C	10°C			
IDFA3E	35°C 0.7 MPa	12	15	17	R134a (HFC)	Rc 3/8	P. 72 to 74
IDFA4E		24	31	34		Rc 1/2	
IDFA6E		36	46	50		Rc 3/4	
IDFA8E		65	83	91			
IDFA11E		80	101	112			
IDFA15E		120	152	168	R407C (HFC)	Rc 1	P. 75 to 77
IDFA37E		182	231	254		R 1	
IDFA55E		273	347	382		R 1 1/2	
IDFA75E		390	432	510		R 2	
IDFA75E		660	720	822			

2. Large size Series IDFA□F



Model	Rated inlet condition	Outlet air pressure dew point	Air flow capacity (m ³ /h [ANR])	Port size	Page
IDFA100F-38	40°C 0.7 MPa	10°C	960	R2	P. 78 to 80
IDFA125F-38			1210	R2 1/2	
IDFA150F-38			1500	DIN fringe 80	
IDFA100F-40	35°C 0.7 MPa	3°C	860	R2	
IDFA125F-40			1100	R2 1/2	
IDFA150F-40			1340	DIN fringe 80	

3. Options

Specifications	Applicable model	Suffix (Option symbol)	Page
Cool compressed air output	IDFA3E to 11E	IDFA□E-23-A	P. 81
Anti-corrosive treatment	IDFA3E to 75E	IDFA□E-23-C	
For medium air pressure (Up to 1.6 MPa) (Auto drain bowl type: Metal bowl with level gauge)	IDFA6E to 37E	IDFA□E-23-K	
With heavy duty auto drain (For medium air pressure)	IDFA4E to 75E	IDFA□E-23-L	P. 82
With circuit breaker	IDFA4E to 75E	IDFA□E-23-R	
With terminal block for power supply, run & alarm signal and remote operation	IDFA4E to 75E	IDFA□E-23-T	
Timer type solenoid valve with auto drain (Applicable to medium air pressure)	IDFA4E to 75E	IDFA□E-23-V	

4. Optional Accessories

Description	Page
Dust-protecting filter set	P. 83
Foundation bolt set	

Series IDFA□E

Model Selection

The corrected air flow capacity, which considers the user's operating conditions, is required for selecting the air dryer. Please select using the following procedures.

However, for 400 VAC, model should also be selected based on the amount of processed air of 380 VAC regarding IDFA100F to 150F. (Correction factor is based on the rated conditions of 380 VAC, so when the factor of rated conditions of 400 VAC is inputted, the amount of processed air of 400 VAC can be found.)

1 Read the correction factor.

Obtain the correction factor A to D suitable for your operating condition using the table below.

2 Calculate the corrected air flow capacity.

Obtain the corrected air flow capacity from the following formula.
 Corrected air flow capacity = Air consumption ÷ (Correction factor A x B x C)

3 Select the model.

Select the model which air flow capacity exceeds the corrected air flow capacity using the specification table. (For air flow capacity, refer to the data D below.)

4 Option

Refer to pages 81 and 82.

5 Finalize the model number.

Refer to pages 72, 75 and 78.

6 Select accessories sold separately.

Refer to page 83.

IDFA□E Selection Example

Condition	Data symbol	Correction factor ^(Note)
Inlet air temperature	40°C	A
Ambient temperature	35°C	B
Inlet air pressure	0.5 MPa	C
Air consumption	31 m ³ /h	—

Note) Values obtained from the table below.

Corrected air flow capacity = 31 m³/h ÷ (0.83 x 0.83 x 0.92) = 48.9 m³/h

According to the corrected air flow capacity of 48.9 m³/h, the **IDFA8E** will be selected when the required output air pressure dew point is 3°C. The **IDFA6E** will be selected when the required pressure dew point is 10°C.

Data A: Inlet Air Temperature

Inlet air temperature (°C)	Correction factor		Inlet air temperature (°C)	Correction factor	
	IDFA3E to 37E	IDFA55E to 75E		IDFA100F to 150F	IDFA100F to 150F
5 to 25	1.30	1.33	5 to 30	1.41	
30	1.25	1.16	35	1.21	
35	1	1	40	1	
40	0.83	0.8	45	0.92	
45	0.7	0.64	50	0.75	
50	0.6	0.48	55	0.63	
			60	0.53	

Data B: Ambient Temperature

Ambient temperature (°C)	Correction factor		Ambient temperature (°C)	Correction factor	
	IDFA3E to 11E	IDFA15E to 75E		IDFA100F to 150F	IDFA100F to 150F
20	1.1	1.1	2 to 25	1.06	
25	1	1	30	1.02	
30	0.91	0.97	32	1	
35	0.83	0.89	35	0.99	
40	0.79	0.77	40	0.98	
			45	0.92	

Data C: Inlet Air Pressure

Inlet air pressure (MPa)	Correction factor		Inlet air pressure (MPa)	Correction factor	
	IDFA3E to 11E	IDFA15E to 75E		IDFA100F to 150F	IDFA100F to 150F
0.3	0.80	0.72	0.2	0.84	
0.4	0.87	0.81	0.3	0.87	
0.5	0.92	0.88	0.4	0.9	
0.6	0.96	0.95	0.5	0.93	
0.7	1.00	1.00	0.6	0.96	
0.8	1.04	1.06	0.7	1	
0.9	1.07	1.11	0.8	1.03	
1	1.1	1.16	0.9	1.06	
1.2	1.16	1.21	1 to 1.6	1.09	
1.4	1.21	1.25			
1.6	1.25	1.27			

Data D: Air Flow Capacity

Model	Air flow capacity (m ³ /h [ANR])	Air flow capacity (m ³ /h [ANR])				
		IDFA3E	IDFA4E	IDFA6E	IDFA8E	IDFA11E
Outlet air pressure dew point	3°C	12	24	36	65	80
	7°C	15	31	46	83	101
	10°C	17	34	50	91	112

Note) In case of "Option A (Cool compressed air output)", the air flow capacity is different. Refer to page 81 for details.

Model	Air flow capacity (m ³ /h [ANR])	Air flow capacity (m ³ /h [ANR])				
		IDFA15E	IDFA22E	IDFA37E	IDFA55E	IDFA75E
Outlet air pressure dew point	3°C	120	182	273	390	660
	7°C	152	231	347	432	720
	10°C	168	254	382	510	822

Model	Air flow capacity (m ³ /h [ANR])	Air flow capacity (m ³ /h [ANR])		
		IDFA100F	IDFA125F	IDFA150F
Outlet air pressure dew point	3°C	670	860	1045
	7°C	816	1029	1275
	10°C	960	1210	1500

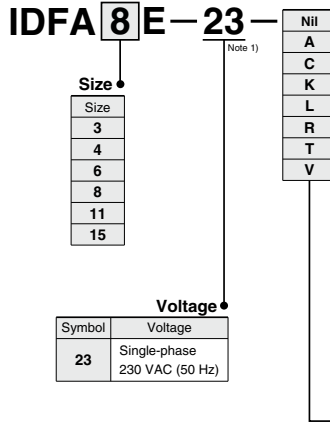
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AFF
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AMD
AMH
AME
AMF
ZFC
SF
SFD
LLB
AD□
GD

Refrigerant R134a (HFC)

Series IDFA□E

3E, 4E, 6E, 8E, 11E, 15E
(Inlet air temperature: 35°C)

How to Order



Options and Available Combinations (Size/Option)

Symbol <small>Note 2)</small>		Nil	A	C	K	L	R	T	V
Size	Option	None	Cool compressed air output	Anti-corrosive treatment	For medium air pressure (Auto drain bowl type: Metal bowl with level gauge)	With heavy duty auto drain (Applicable to medium air pressure)	With circuit breaker	With terminal block for run & alarm signal	Timer type solenoid valve with auto drain (Applicable to medium air pressure)
	3		●	●	●	—	—	—	—
4		●	●	●	—	—	—	—	●
6		●	●	●	●	●	●	●	●
8		●	●	●	●	●	●	●	●
11		●	●	●	●	●	●	●	●
15		●	—	●	●	●	●	●	●

Note 1) G thread (PF thread) can accept the R thread (PT male thread), thus making no "F" in the thread specification setting. A conversion adaptor for the R thread (PT male thread) is also contained.

Note 2) Enter alphabetically when multiple options are combined.

However, the following combination cannot be achieved.

- Combination of K, L and V cannot be achieved because an auto drain can only be attached to a single option.

Note 3) Refer to pages 81 and 82 for further details on optional specifications.

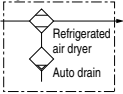
Standard Specifications



Specifications		Model		Standard temperature air inlet					
				IDFA3E	IDFA4E	IDFA6E	IDFA8E	IDFA11E	IDFA15E
Operating range (Note 1)	Fluid	Compressed air							
	Inlet air temperature (°C)	5 to 50							
	Inlet air pressure (MPa)	0.15 to 1.0							
	Ambient temperature (Humidity) (°C)	2 to 40 (Relative humidity of 85% or less)							
Rated specifications (Note 4)	Air flow capacity (m³/h)	Standard condition (ANR) (Note 1)	Outlet air pressure dew point (3°C)	12	24	36	65	80	120
			Outlet air pressure dew point (7°C)	15	31	46	83	101	152
	Compressor intake condition (Note 2)	Outlet air pressure dew point (10°C)	17	34	50	91	112	168	
		Outlet air pressure dew point (3°C)	13	25	37	68	83	125	
		Outlet air pressure dew point (7°C)	16	32	48	86	105	158	
		Outlet air pressure dew point (10°C)	18	35	52	95	116	175	
Inlet air pressure (MPa)		0.7							
Inlet air temperature (°C)		35							
Ambient temperature (°C)		25							
Power supply voltage		Single-phase: 230 VAC [Voltage fluctuation ±10%] 50 Hz							
Electric consumption (Note 6)	Power consumption (W)	180		208		385		470	
	Operating current (A)	1.2		1.4		2.7		3.0	
Applicable circuit breaker capacity (sensitivity current 30 mA) (A)		5						10	
Condenser		Air-cooled							
Refrigerant		R134a (HFC)							
Auto drain		Float type (Normally open)							
Port size		Rc 3/8		Rc 1/2		Rc 3/4		Rc 1	
Accessory		Hexagon nipple							
Weight (kg)		18		22		23		27	
Coating color		Body panel: White 1 Base: Gray 2							
Compliant standards		EC Directive (with CE marking)							

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Symbol

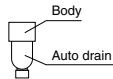


- Note 1) Air flow capacity under the standard condition (ANR) [atmospheric pressure at 20°C, relative humidity at 65%]
 Note 2) Air flow capacity converted by the compressor intake condition [atmospheric pressure at 32°C, relative humidity at 75%].
 Note 3) The operation range does not guarantee the use with normal air flow capacity.
 Note 4) Please select a model in accordance with the Model Selection (Page 71).
 Note 5) Product other than the option R is not equipped with an earth leakage breaker. Please purchase an appropriate earth leakage breaker separately.
 Note 6) These values are reference values under rated conditions, and are not guaranteed. Do not use these values for the thermal set values, etc.
 Note 7) When a short-term interruption of the power supply (including momentary interruption) occurs in this equipment, the restarting of normal operations may require some time or may be impossible due to the operation of protective devices even after the supply of power returns.

Replacement Parts

Model	IDFA3E	IDFA4E	IDFA6E	IDFA8E	IDFA11E	IDFA15E
Auto drain replacement part no. (Note 8)	AD38			AD48		

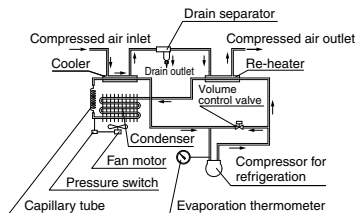
- Note 8) The part number for the auto drain components without including the body part.
 Body part replacement is impossible.



Construction Principle (Air/Refrigerant Circuit)

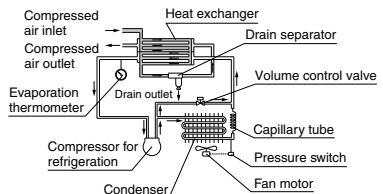
Humid, hot air coming into the air dryer will be cooled down by a cooler re-heater (heat exchanger). Water condensed at this time will be removed from the air by auto drain and drained out automatically. Air separated from the water will be heated by a cooler re-heater (heat exchanger) to obtain the dried air, which goes through to the outlet side.

IDFA3E



IDFA4E, IDFA6E

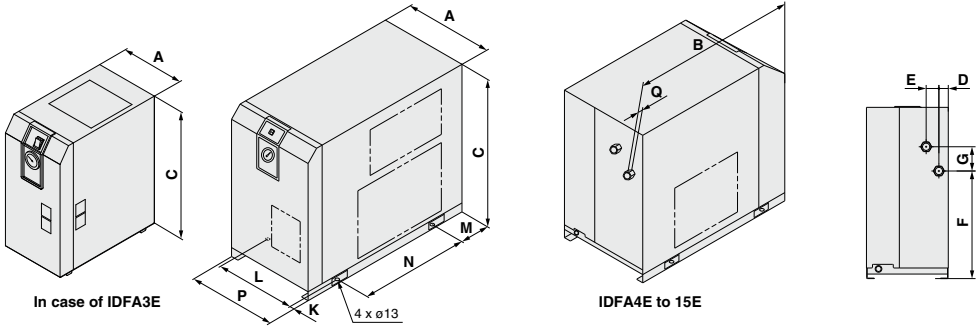
IDFA8E, IDFA11E, IDFA15E



Series IDFA□E

Dimensions

IDFA3E to 15E



Dimensions

Model	Port size	A	B	C	D	E	F	G	K*	L*	M*	N*	P	Q
IDFA3E	Rc 3/8	226	410	473	67	125	304	33	36	154	21	330		15
IDFA4E	Rc 1/2		453	498			283					275		13
IDFA6E		270	455		31	42		80	15	240	80		300	—
IDFA8E	Rc 3/4		485	568			355							
IDFA11E														
IDFA15E	Rc 1	300	603	578	41	54	396	87		43	101	380	314	16

* Meaning the foot dimensions for the IDFA3E.

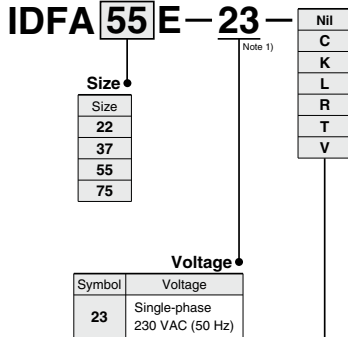
Refrigerant R407C (HFC)

Series IDFA□E

22E, 37E, 55E, 75E

(Inlet air temperature: 35°C)

How to Order



Options and Available Combinations (Size/Option)

Symbol ^{Note 2)}	Nil	C	K	L	R	T	V
	Option	None	Anti-corrosive treatment	For medium air pressure (Auto drain bowl type: Metal bowl with level gauge)	With heavy duty auto drain (Applicable to medium air pressure)	With circuit breaker	With terminal block for run & alarm signal
Size							
22	●	●	●	●	●	●	●
37	●	●	●	●	●	●	●
55	●	●	—	●	●	●	●
75	●	●	—	●	●	●	●

Note 1) G thread (PF thread) can accept the R thread (PT male thread), thus making no "F" in the thread specification setting.

Note 2) Enter alphabetically when multiple options are combined. However, the following combination cannot be achieved.

- Combination of K, L and V cannot be achieved because an auto drain can only be attached to a single option.

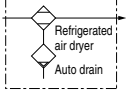
Note 3) Refer to pages 81 and 82 for further details on optional specifications.

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AMF
ZFC
SF
SFD
LLB
AD□
GD

Standard Specifications



Symbol



Specifications		Model				
		IDFA22E	IDFA37E	IDFA55E	IDFA75E	
Operating range (Max.)	Fluid	Compressed air				
	Inlet air temperature (°C)	5 to 50				
Related specifications (Note 4)	Inlet air pressure (MPa)	0.15 to 1.0				
	Ambient temperature (Humidity) (°C)	2 to 40 (Relative humidity of 85% or less)				
Air flow capacity (m³/h)	Standard condition (ANR) <small>Note 1</small>	Outlet air pressure dew point (3°C)	182	273	390	660
		Outlet air pressure dew point (7°C)	231	347	432	720
	Compressor intake condition <small>Note 2</small>	Outlet air pressure dew point (10°C)	254	382	510	822
		Outlet air pressure dew point (3°C)	189	284	405	686
		Outlet air pressure dew point (7°C)	240	361	449	748
		Outlet air pressure dew point (10°C)	264	397	530	854
Inlet air pressure (MPa)	0.7					
Inlet air temperature (°C)	35					
Ambient temperature (°C)	25					
Power supply voltage	Single-phase: 230 VAC [Voltage fluctuation ±10%] 50 Hz					
Electrical demands	Power consumption (W) <small>Note 6</small>	760	1390	1700		
	Operating current (A) <small>Note 6</small>	4.3	6.1	7.9		
	Applicable circuit breaker capacity (A) <small>Note 5</small>	10	20			
Condenser	Air-cooled					
Refrigerant	R407C (HFC)					
Auto drain	Float type (Normally open)					
Port size	R 1	R 1½		R 2		
Accessory	—					
Weight (kg)	54	62	100	116		
Coating color	Body panel: White 1 Base: Gray 2					
Compliant standards	EC Directive (with CE marking)					

Note 1) Air flow capacity under the standard condition (ANR) [atmospheric pressure at 20°C, relative humidity at 65%].

Note 2) Air flow capacity converted by the compressor intake condition [atmospheric pressure at 32°C, relative humidity at 75%].

Note 3) The operation range does not guarantee the use with normal air flow capacity.

Note 4) When operating conditions are different from the rated specifications, please select a model in accordance with the Model Selection (Page 71).

Note 5) Product other than the option R is not equipped with an earth leakage breaker. Please purchase an appropriate earth leakage breaker separately.

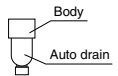
Note 6) These values are reference values under rated conditions, and are not guaranteed. Do not use these values for the thermal set values, etc.

Note 7) When a short-term interruption of the power supply (including momentary interruption) occurs in this equipment, the restarting of normal operations may require some time or may be impossible due to the operation of protective devices even after the supply of power returns.

Replacement Parts

Model	IDFA22E	IDFA37E	IDFA55E	IDFA75E
Auto drain replacement part no. <small>Note 8</small>	AD48			

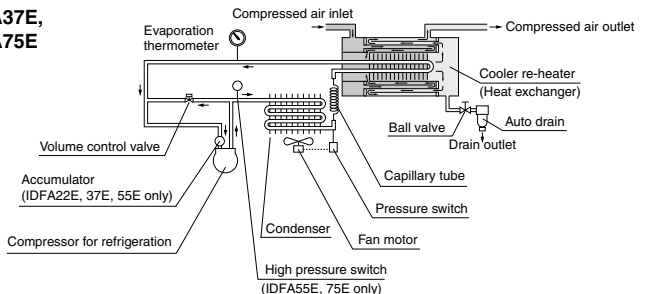
Note 8) The part number for the auto drain components without including the body part. Body part replacement is impossible.

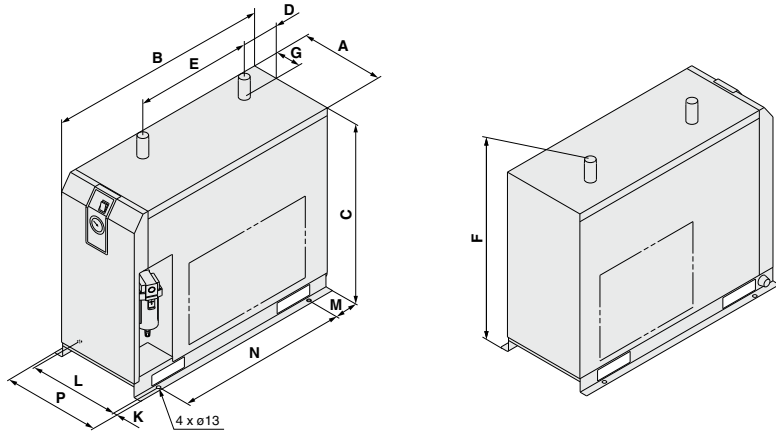


Construction Principle (Air/Refrigerant Circuit)

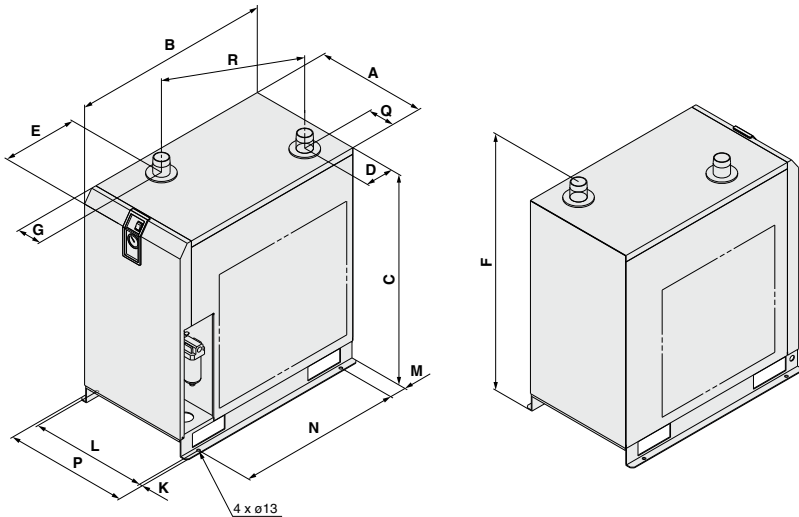
Humid, hot air coming into the air dryer will be cooled down by a cooler re-heater (heat exchanger). Water condensed at this time will be removed from the air by auto drain and drained out automatically. Air separated from the water will be heated by a cooler re-heater (heat exchanger) to obtain the dried air, which goes through to the outlet side.

IDFA22E, IDFA37E, IDFA55E, IDFA75E



Dimensions
IDFA22E, IDFA37E

Dimensions

		(mm)												
Model	Port size	A	B	C	D	E	F	G	K	L	M	N	P	Q
IDFA22E	R 1	290	775	623	134	405	698	93	13	25	85	600	340	—
IDFA37E	R 1½		855									680		

IDFA55E, IDFA75E

Dimensions

		(mm)													
Model	Port size	A	B	C	D	E	F	G	K	L	M	N	P	Q	R
IDFA55E	R 2	470	855	800	(128)	(273)	(868)	(110)	13	500	75	700	526	(110)	519
IDFA75E				900			(968)								

- HAA
- HAW
- AT
- IDF
- IDU
- IDFA**
- IDFB
- IDH
- ID
- IDG
- IDK
- AMG
- AFF
- AM
- AMD
- AMH
- AME
- AMF
- ZFC
- SF
- SFD
- LLB
- AD□
- GD

Refrigerant R407C (HFC)

Series IDFA100F/125F/150F

For use in Europe, Asia and Oceania

(Max. inlet air temperature: 60°C, Max. ambient temperature: 45°C)



How to Order

For use in
Asia and Oceania

IDFA **100** F - **38** -

Size

Size
100
125
150

Voltage

Symbol	Voltage
38	Three-phase 380 VAC (50 Hz)

Nil
C
K
R
V

Option

Symbol ^{Note)}	Description
Nil	None
C	Anti-corrosive treatment for copper tube
K	Moderate pressure specification
R	With a circuit breaker
V	With a timer controlled solenoid valve type auto drain

Note) Enter alphabetically when multiple options are combined.
Example: When the IDFA100F-38 is provided with options C or R or V, the model number will be the IDFA100F-38-CRV.

For use in Europe

IDFA **100** F - **40** -

Size

Size
100
125
150

Voltage

Symbol	Voltage
40	Three-phase 400 VAC (50 Hz)

Nil
C
K
R
V

Option

Symbol ^{Note)}	Description
Nil	None
C	Anti-corrosive treatment for copper tube
K	Moderate pressure specification (1.6 MPa)
R	With a circuit breaker
V	With a timer controlled solenoid valve type auto drain

Note) Enter alphabetically when multiple options are combined.
Example: When the IDFA100F-40 is provided with options C or R or V, the model number will be the IDFA100F-40-CRV.

Refrigerated Air Dryer *Series IDFA100F/125F/150F*

Standard Specifications



Specifications	Model	For use in Asia and Oceania			For use in Europe		
		IDFA100F-38	IDFA125F-38	IDFA150F-38	IDFA100F-40	IDFA125F-40	IDFA150F-40
Operating conditions	Fluid	Compressed air					
	Inlet air temperature °C	5 to 60					
	Inlet air pressure MPa	0.15 to 1.0/0.15 to 1.6 for option K					
	Ambient temperature (humidity) °C	2 to 45 (Relative humidity 85% or less)					
Rated conditions	Air flow capacity m ³ /h	960	1210	1500	860	1100	1340
	Standard condition (ANR) <small>Note 1)</small>						
	Compressor intake condition <small>Note 2)</small>	1000	1255	1560	875	1119	1363
Rated conditions	Inlet air pressure MPa	0.7					
	Inlet air temperature °C	40			35		
	Ambient temperature °C	32			25		
	Outlet air pressure dew point °C	10			3		
Applicable circuit breaker capacity <small>Note 4)</small>	Power supply voltage	Three-phase 380 VAC			Three-phase 400 VAC		
	Power consumption kW	2.8	3.4	3.4	2.5	2.7	2.7
	Operating current A	5.1	6.3	6.3	4.5	5.3	5.9
	Applicable circuit breaker capacity A	15					
Heat discharge from condenser	Heat discharge from condenser kW	7.5	9	11.5	7	8	10
	Refrigerant	R407C (HFC)					
Auto drain	Auto drain	Float type (Normally open) The option V stands for a timer type solenoid valve.					
Port size	Port size	R2	R2 1/2	DIN flange 80	R2	R2 1/2	DIN flange 80
	Weight kg	245	270	350	245	270	350
Coating color	Coating color	Body panel: White 1 Base: Gray 2					
Compliant standards	Compliant standards	EC Directive compliant (with CE marking)					

Note 1) Air flow capacity under the standard condition (ANR) [atmospheric pressure 20°C, relative humidity 65%]

Note 2) Air flow capacity converted by the compressor intake condition [atmospheric pressure 32°C]

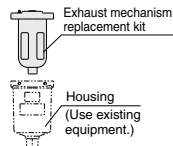
Note 3) The operation range does not guarantee the use with normal air flow capacity. When operating conditions are different from the rated specifications, please select a model in accordance with Model Selection (page 71).

Note 4) Install a circuit breaker with a sensitivity 30 mA.

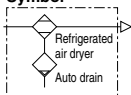
Replacement Parts

Air dryer model	IDFA100F	IDFA125F	IDFA150F
Heavy duty auto drain replacement part no. <small>Note 5)</small>	ADH-E400		
Dustproof filter set for condenser	IDF-FL219	IDF-FL220	

Note 5) Part number of only the exhaust mechanism replacement kit excluding the housing



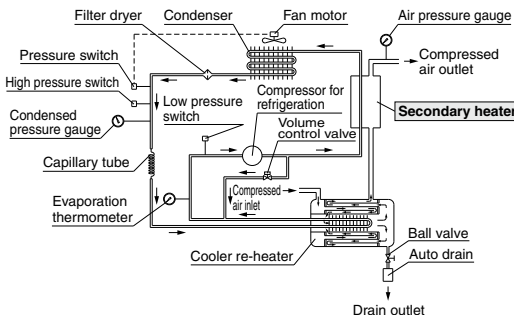
Symbol



Construction (Air/Refrigerant Circuit)

Hot and humid air entering the air dryer is cooled down by the cooler re-heater (heat exchanger). The moisture which is condensed and separated is automatically exhausted by the auto drain. The air which has had its moisture removed is heated in two stages by the re-heater (heat exchanger) in the cooler re-heater and by the secondary heater, and is supplied to the outlet side as warm and dry air.

IDFA100F/125F/150F



Secondary heater

Compressed air from which drainage has been exhausted exchanges heat with refrigerant which has been compressed by the refrigerator, to give the following effects:

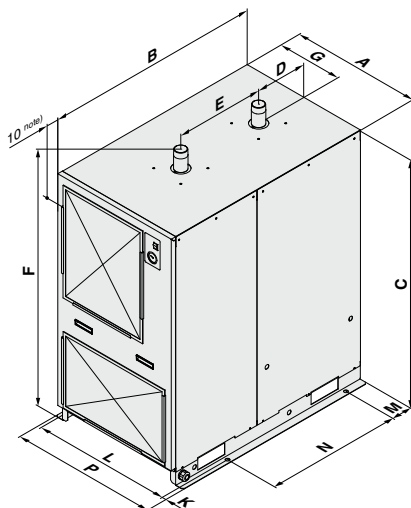
1. The outlet air temperature increases, preventing condensation of the piping on the outlet side.
2. The amount of heat exhausted from the condenser is reduced.
3. Energy saving operation of the dryer is achieved by reducing the amount of heat exhausted from the condenser.

HAA
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LLB
AD
GD

Series IDFA100F/125F/150F

Dimensions

IDFA100F/125F



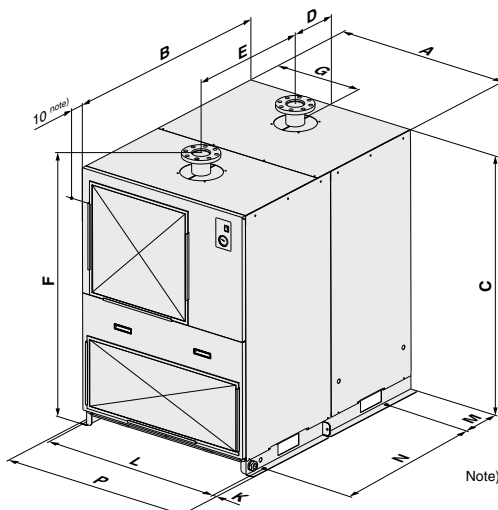
Note) In addition to the overall length of the body, the filter mounting part (bracket) projects 10 mm.

Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	K	L	M	N	P
IDFA100F	R2	670	1120	1276	267	460	1375	335	20	712	107	700	752
IDFA125F	R2 1/2	700				655		350			78	935	

IDFA150F



Note) In addition to the overall length of the body, the filter mounting part (bracket) projects 10 mm.

Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	K	L	M	N	P
IDFA150F	DIN flange 80	950	1290	1332	268	720	1432	475	20	990	217	935	1030

Series IDFA□E/F Options 1

For "How to Order" optional models, refer to pages 72, 75 and 78.

A Option symbol Cool compressed air output IDFA3E to 11E

There is no heating of cooled, dehumidified air as it leaves the air dryer. The air flow capacity with this option is smaller than that of the standard dryer. (The external dimensions are identical with the standard product.)
 (Note) Perform thermal insulation treatment for piping and equipment installed after the dryer to prevent the formation of condensation.

Air Flow Capacity

Model	IDFA3E	IDFA4E	IDFA6E	IDFA8E	IDFA11E
Air flow capacity m ³ /h (ANR)	8	23	29	32	39

Conditions: Inlet air pressure: 0.7 MPa, Inlet air temperature: 35°C,
 Outlet air temperature: 10°C Ambient temperature: 25°C

C Option symbol Anti-corrosive treatment IDFA all models

This minimizes the corrosion of the copper and copper alloy parts when the air dryer is used in an atmosphere containing hydrogen sulfide or sulfuric acid gas. (Corrosion cannot be completely prevented.)
 Special epoxy coating: Copper tube and copper alloy parts.
 The coating is not applied on the heat exchanger or around electrical parts, where operation may be affected by the coating.

* Corrosion is not covered under warranty.

K Option symbol Moderate pressure specification (Auto drain bowl type: Metal bowl with level gauge) IDFA6E to 37E

The auto drain is changed from the standard one to one with a moderate pressure specification.
 A metal bowl with a level gauge which can confirm the water level is used for the auto drain.

Specifications

1. Maximum operating pressure: 1.6 MPa
2. Dimensions ... same as standard products

Replacement Parts

Model	Auto drain assembly part no.	Note
IDFA6E to 15E	IDF-S0086	The AD48-8-X2110 auto drain, insulator, and One-touch fitting are included.
IDFA22E, 37E	AD48-8-X2110	Single auto drain unit

K Option symbol Moderate pressure specification IDFA100F to 150F

The maximum operating pressure is 1.6 MPa.
 The internal drain piping material is changed from nylon to metal.

Specifications

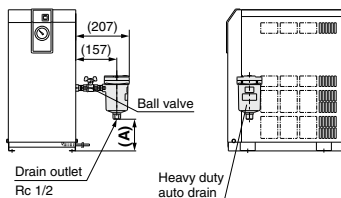
1. Maximum operating pressure: 1.6 MPa
2. Dimensions ... same as standard products

L Option symbol With heavy duty auto drain (Applicable to moderate air pressure) IDFA4E to 75E

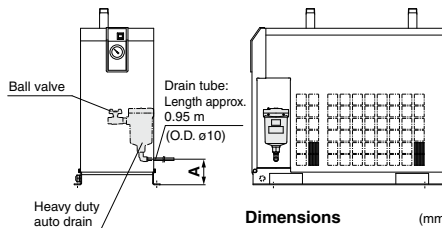
The float type auto drain used in the standard air dryer is replaced with a heavy duty auto drain (ADH4000-04) which enables the drainage to discharge more efficiently.

Dimensions (mm)	
Model	A
IDFA4E	55
IDFA6E	67
IDFA8E, 11E	139
IDFA15E	47

IDFA4E to 15E



IDFA22E to 75E



Dimensions (mm)	
Model	A
IDFA22E, 37E	Approx. 100
IDFA55E, 75E	Approx. 120

Note 1) The heavy duty auto drain and the ball valve are both enclosed in the same shipping package as the main body of the air dryer. Customers are required to mount the parts to the air dryer. (Except IDFA22E to 75E)

Note 2) Customers will need to supply the fitting and tubing for the drain piping. (Except IDFA22E to 75E)

Replacement Parts: Heavy Duty Auto Drain

Model	Replacement part no. (Description)	Configuration
IDFA4E to 15E	ADH4000-04 (Heavy duty auto drain)	Heavy duty auto drain
IDFA22E to 75E	ADH-E400 (Replacement kit for exhaust mechanism)	Replacement kit for exhaust mechanism Housing (You don't need to purchase a new housing.)

HAA
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AMF
ZFC
SF
SFD
LLB
AD□
GD

Series IDFA□E/F Options 2

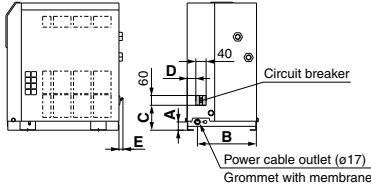
For "How to Order" optional models, refer to pags 72, 75 and 78.

R Option symbol

With circuit breaker IDFA4E to 75E, IDFA100F to 150F

A circuit breaker with cover is attached to the side of the air dryer. This saves additional electrical wiring at the time of installation.

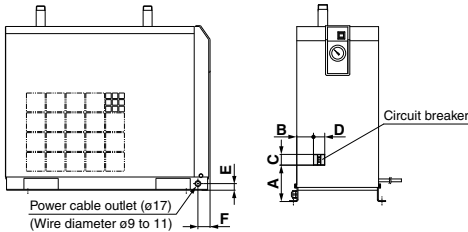
IDFA4E to 15E



Dimensions

Model	A	B	C	D	E
IDFA4E, 6E, 8E, 11E	32	230	97	34	15
IDFA15E	43	258	102	82	—

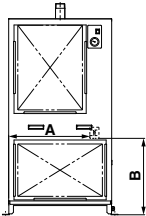
IDFA22E to 75E



Dimensions

Model	A	B	C	D	E	F
IDFA22E	125	59	60	40	25	46
IDFA37E		39		60	50	36
IDFA55E	148	81	60	60	50	36
IDFA75E	133	73		60	50	36

IDF100F to 150F



Dimensions

Model	A	B
IDFA100F	509	535
IDFA125F	505	535
IDFA150F	628	537

Breaker Capacity and Sensitivity Current

Voltage	Model	Breaker capacity	Sensitivity current
230 V type	IDFA4E-23, IDFA6E-23 IDFA8E-23, IDFA11E-23	5 A	30 mA
	IDFA15E-23, IDFA22E-23 IDFA37E-23, IDFA55E-23	10 A	
	IDFA75E-23	20 A	
	IDFA100F, IDFA125F IDFA150F	15 A	
380/400 V type	IDFA100F, IDFA125F IDFA150F	15 A	

T Option symbol

With terminal block for power supply, run & alarm signal and remote operation IDFA4E to 75E

In addition to the terminals for the power supply, terminals for the operating signal and the error signal are also available. (No-voltage contact)
Also, in the case of remote control, operate it from the power supply side while the air dryer switch remains ON.

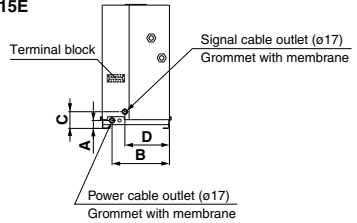
Contact capacity: 230 VAC, 4 A 24 VDC, 5 A for operating and error signals.

Minimum current value: 20 V, 5 mA (AC/DC) for operating and error signals.

Note 1) Terminal block for power supply, run & alarm signal and remote operation is mounted on the standard types of the IDFA100F to 150F.

Note 2) Please be sure to confirm the electric circuits with the drawings or instruction manual before using the output signal.

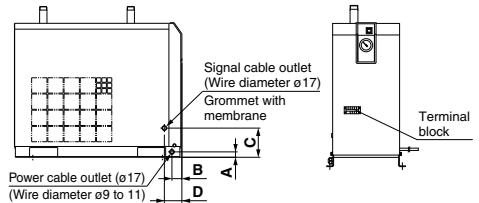
IDFA4E to 15E



Dimensions

Model	A	B	C	D
IDFA4E, 6E, 8E, 11E	32	230	67	179
IDFA15E	43	258	77	158

IDFA22E to 75E



Dimensions

Model	A	B	C	D
IDFA22E, 37E	25	46	135	81
IDFA55E, 75E	50	36	207	81

V Option symbol

Timer type solenoid valve with auto drain IDFA4E to 75E IDFA100F to 150F (Applicable to medium air pressure)

Drainage is discharged by controlling a solenoid valve with a timer. A strainer for solenoid valve protection and stop valve are also included. (Dimensions are the same as the standard type.)



Maximum operating pressure: 1.6 MPa (IDFA100F to 150F: 1.0 MPa)

* The timer-type solenoid valve actuates once (for 0.5 s) every 30 s.

Replacement Parts

Model	Part no.	Note
IDFA4E to 37E	IDF-S0198	230 VAC
IDFA55E, 75E	IDF-S0302	230 VAC
IDFA100F to 150F	IDF-S0405	200 VAC

Series IDFA□E/F Optional Accessories

	Features	Specifications	Applicable dryer
Dust-protecting filter set 	Prevents a decline in the performance of the air dryer, even in a dusty atmosphere.	Max. ambient temperature 40°C	IDFA3E to 75E
Foundation bolt set 	Bolts for fixing the air dryer to the foundations. Easy to secure by striking its axle.	Stainless steel	IDFA4E to 75E IDFA100F to 150F

How to Order

Dust-protecting filter set

IDF — FL **209**

Applicable dryer

Symbol	Applicable dryer
209	IDFA3E
202	IDFA4E
203	IDFA6E
204	IDFA8E
205	IDFA11E
206	IDFA15E
207	IDFA22E
208	IDFA37E
213	IDFA55E
214	IDFA75E

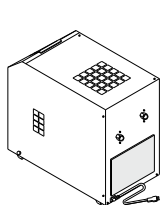
Foundation bolt set

IDF — AB **500**

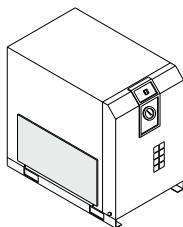
Applicable dryer

Symbol	Applicable dryer
500	IDFA4E to 75E
501	IDFA100F to 150F

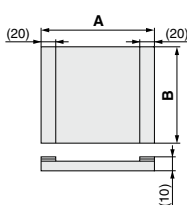
Dust-protecting Filter Set/Dimensions



(IDF-FL209)



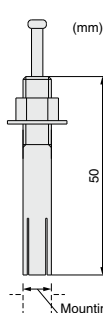
(IDF-FL202 to 208, 213, 214)



Dimensions

Part no.	Applicable dryer	A	B	(mm) Weight (g)
IDF-FL209	IDFA3E	220	240	35
IDF-FL202	IDFA4E	310		45
IDF-FL203	IDFA6E	375	195	55
IDF-FL204	IDFA8E	340		70
IDF-FL205	IDFA11E	375	265	75
IDF-FL206	IDFA15E	440	370	120
IDF-FL207	IDFA22E	420	315	100
IDF-FL208	IDFA37E	550	365	140
IDF-FL213	IDFA55E	720	400	175
IDF-FL214	IDFA75E	610	560	190

Foundation Bolt Set/Dimensions



Mounting hole diameter: $\phi 10.5$

Dimensions

Part no.	Applicable dryer	Nominal thread size	Material	(mm) Pcs. of 1 set
IDF-AB500	IDFA4E to 75E			
IDF-AB501	IDFA100F to 150F	M10	Stainless steel	4

HAA
HAW

AT

IDF
IDU

IDFA

IDFB

IDH

ID

IDG

IDK

AMG

AMG

AMG

AMG

AMG

AMG

AMH

AMH

AMF

ZFC

ZFC

SF

SFD

LLB

AD□

GD



Series IDFA□E/F

Specific Product Precautions 1

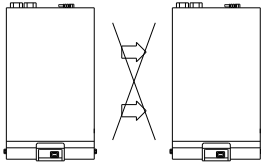
Be sure to read before handling.

Refer to front matter 43 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment Precautions.

Installation

⚠ Caution

- Avoid locations where the air dryer will be in direct contact with wind and rain. (Places where relative humidity is greater than 85%)
- Avoid exposure to direct sunlight.
- Avoid locations that contain much dust, corrosive gases, or flammable gases. Failure due to corrosion is not covered under warranty. However, when the risk of corrosion is high, select "Option C" (copper tubing with anti-corrosive treatment).
- Avoid locations of poor ventilation and high temperature.
- Avoid too close to a wall etc. Leave sufficient room between the dryer and the wall according to the "Maintenance space" in the operation manual.
- Avoid locations where a dryer could draw in high temperature air that is discharged from an air compressor or other dryer.



The air exhaust should not flow into the neighboring equipment. (Top side)

- Avoid locations subjected to vibration.
- Avoid possible locations where the drain can freeze.
- Use the air dryer with an ambient temperature lower than 40°C.
- Avoid installation on machines for transporting, such as trucks, ships, etc.

Drain Tube

⚠ Caution

- A polyurethane tube is attached as a drain tube for the IDFA3E to 75E and IDFA100F to 150F. Use this tube to discharge drainage.
- Do not use the drain tube in an upward direction. Do not bend or crush the drain tube. (Operation of the auto drain will stop water vapor from discharging through the air outlet.) If it is unavoidable that the tube goes upwards, make sure it only goes as far as the position of the auto drain.

Power Supply

⚠ Caution

- Connect the power supply to the terminal block.
- Install a suitable circuit breaker applicable for the specific model.
- The voltage fluctuation should be maintained within $\pm 10\%$ of the rated voltage.

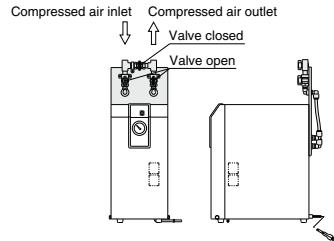
Note) Select a circuit breaker with a sensitivity current 30 mA. As regards rated current, refer to "Applicable circuit breaker capacity" on pages 73, 76 and 79.

Air Piping

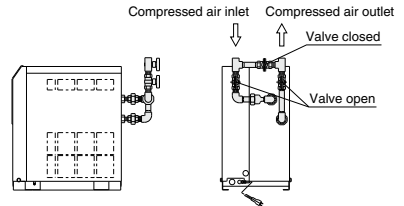
⚠ Caution

- Be careful to avoid an error in connecting the air piping at the compressed air inlet (IN) and outlet (OUT).
- Install by-pass piping since it is needed for maintenance.

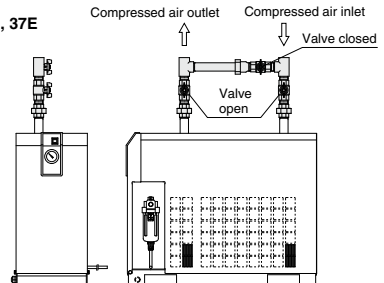
IDFA3E



IDFA4E to 15E



IDFA22E, 37E





Series IDFA□E/F

Specific Product Precautions 2

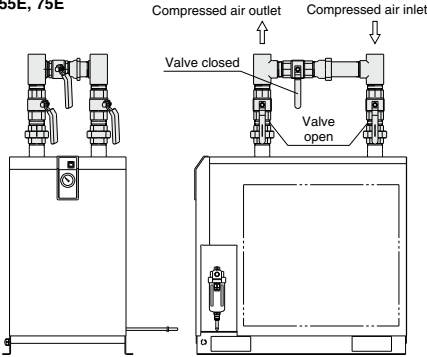
Be sure to read before handling.

Refer to front matter 43 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment Precautions.

Air Piping

Caution

IDFA55E, 75E



- When tightening piping at the air inlet/outlet tube, the hexagonal parts of the port on the air dryer side or piping should be held firmly with a spanner or adjustable angle wrench.
- Variations in operating conditions may cause condensation to form at the surface of the outlet piping. Apply thermal insulation around the piping to prevent condensation from forming.
- Vibration resulting from the compressor should not be transmitted through air piping to the air dryer.
- Do not allow the weight of the piping to lie directly on the air dryer.

Protection Circuit

Caution

When the air dryer is operated under the following stated conditions, a protection circuit is activated, the light turns off and operation stops.

- When the compressed air temperature is too high.
- When the compressed air flow rate is too high.
- When the ambient temperature is too high. (40°C or higher, however, 45°C or higher for IDFA100F to 150F)
- When the fluctuation of the power supply is beyond the rated voltage $\pm 10\%$.
- When the dryer is drawing in high temperature air that is discharged from an air compressor or other dryer.
- The ventilation port is obstructed by a wall or clogged with dust.

Compressor Air Delivery

Caution

Use an air compressor with an air delivery of 100 L/min or larger with the IDFA3E to 75E series.

Since the auto drain of the IDFA3E to 75E is designed in such a way that the valve remains open unless the air pressure rises to 0.15 MPa or higher (0.05 MPa or more for IDFA100F to 150F), air will blow out from the drain discharge port at the time of air compressor start-up until the pressure increases. Therefore, if an air compressor has a small air delivery, the pressure may not be sufficient.

Auto Drain

Caution

The auto drain may not function properly, depending on the quality of the compressed air. Check the operation once a day.

Cleaning of Ventilation Area

Caution

Remove dust from the ventilation area once a month using a vacuum cleaner or an air blow nozzle.

Time Delay for Restarting

Caution

Allow at least three minutes before restarting the dryer. If the air dryer is restarted within three minutes after being stopped, the protection circuit will be activated, operating light turns off and the dryer will not be activated.

Modifying the Standard Specifications

Caution

Do not modify the standard product using any of the optional specifications once the product has been supplied to a customer. Check the specifications carefully before selecting an air dryer.

HAA
HAW

AT

IDF
IDU

IDFA

IDFB

IDH

ID

IDG

IDK

AMG

AFF

AM

AMD

AMH

AME

AMF

ZFC

SF

SFD

LLB

AD□

GD