

# Series IDW

## Heatless Regenerative Dryers

- Designed for simple service with toploding cartridge design
- Intelligent electronic processor; dewpoint management control option available for IDW46N-IDW360N
- -40°F (-40°C) pressure dewpoint standard, -100°F (-73°C) optional
- Suitable for global installation – 12~24VDC or 100~240VAC (50/60 Hz)
- Vertical or horizontal mounting
- Multi-ported for flexible installation
- Pre-filter and integral post-filter are standard for IDW04N-IDW35N

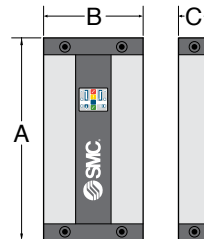


## Specifications

Dryer Model	Connection Size	Flow Rate (scfm)			Dryer Configuration	Dimension (inch)			Weight (lbs)
		Inlet (max)	Outlet (max)	Purge		A	B	C	
IDW04N	3/8"	4	3.2	0.8	Simplex	17.5	11	3.6	29
IDW06N		6	4.8	1.2		20			31
IDW08N		8	6.4	1.6		22			33
IDW10N		10	8	2		25			36
IDW15N		15	12	3		32			43
IDW25N		25	20	5		42			53
IDW35N		35	28	7		57.5			68

1. Models IDW04N to IDW35N will include a 0.01mm coalescing prefilter (model AFW30-N03-EA). A similar prefilter is recommended for the larger sizes (series AMH or series AFW with EA element).
2. For models IDW45N to IDW365N, the dryer will include a drain adapter kit to allow assembly of the filter to the dryer. This kit consists of a 4mm X 1/4" NPT male elbow and tubing.
3. Simplex models have two desiccant columns (1 per side) while duplex models have four (two per side).

Standard Pressure Dew Point	-40°F
Optional Pressure Dew Point	-100°F
Minimum Working Pressure	58 psig
Maximum Working Pressure	232 psig
Power Supply	12 VDC~24 VDC or 100 VAC~240 VAC
Minimum Inlet Temperature	35°F
Maximum Inlet Temperature	122°F
Minimum Ambient Temperature	41°F
Purge Rate	20%



IDW4N-IDW35N

## Dryer Correction Factors

Operating Pressure (psig)	58	72	87	100	116	130	130	145	160	174	189	203	218	232
Pressure Correction Factor (PCF)*	0.62	0.75	0.87	1	1.12	1.25	1.25	1.37	1.5	1.62	1.75	1.87	2.0	2.12

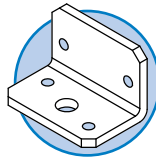
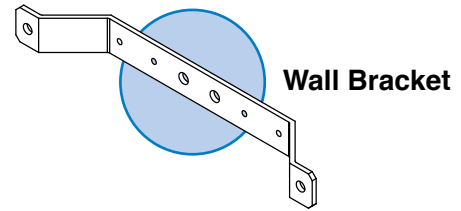
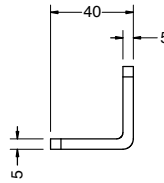
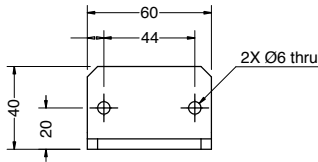
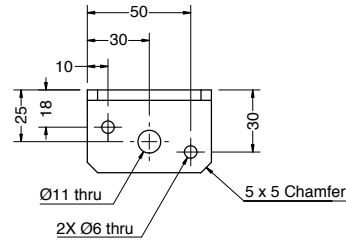
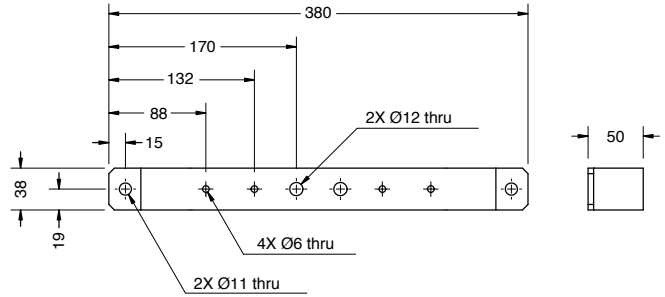
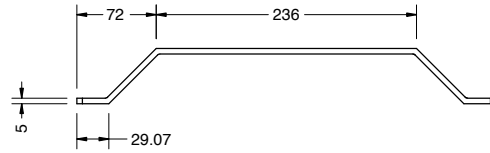
Temperature (°F)	68	77	86	95	104	113	122
Temp. Correction Factor (TCF)	1.07	1.06	1.04	1.00	.088	0.78	0.55

Dew Point (°F)	-40	-100
Dew Point Correction Factor (DCF)	1	0.7

\*Always use the pressure correction factor (PCF) closest to the actual inlet pressure condition  
 Corrected air flow rate = Required air flow rate / (PCF x TCF x DCF)

## Accessories

Part Number	Description	Applicable Models
IDWFB35	Foot Mounting Bracket Kit	IDW04N~35N
IDWWB35	Wall Mounting Bracket Kit	



**Foot Bracket**

Dimensions in mm

## Service Parts

Dryer Model	6,000 Hour Service Kit		12,000 Hour Service Kit		24,000 Hour Service Kit		Valve Service Kit	
	Part Number	Contents	Part Number	Contents	Part Number	Contents	Part Number	Contents
IDW04N	IDWPD1SK01	Silencer kit (1 silencer)	IDWC04-12000	Desiccant cartridges, pack of sealing O-rings and washers, reset cap, instruction booklet	IDWC04-24000	12,000 hour service kit, valve service kit	IDWVSKS01	Exhaust solenoid valves, diaphragms, shuttle valve and O-rings, required seals (not included in 12,000 hour kits)
IDW06N	IDWPD1SK02		IDWC06-12000		IDWC06-24000			
IDW08N			IDWC08-12000		IDWC08-24000			
IDW10N			IDWC10-12000		IDWC10-24000			
IDW15N			IDWC15-12000		IDWC15-24000			
IDW25N			IDWC25-12000		IDWC25-24000			
IDW35N	IDWC35-12000		IDWC35-24000					
IDW45N*	IDWPD2SK01		IDWC45DF-12000		IDWC45DF-24000			
IDW55N*			IDWC55DF-12000		IDWC55DF-24000			
IDW65N*			IDWC65DF-12000		IDWC65DF-24000			
IDW85N*			IDWC85DF-12000		IDWC85DF-24000			
IDW105N*			IDWC105DF-12000		IDWC105DF-24000			
IDW135N*	IDWPD2SK02		IDWC135DF-12000		IDWC135DF-24000			
IDW175N*			IDWC175DF-12000		IDWC175DF-24000			
IDW215N*	IDWPD2SK03	IDWC215DF-12000	IDWC215DF-24000					
IDW275N*		IDWC275DF-12000	IDWC275DF-24000					
IDW365N*		IDWC365DF-12000	IDWC365DF-24000					
							IDWVSKS02	
							IDWVSKS03	

\* Models IDW45N through IDW365N are previous generation models and information is shown for service purposes only.

Replacement element part number for IDW04N to IDW35N pre-filter: EL-AFW30A-EA

## Specifications

Dryer Model	Port NPT	Flow Rate (scfm) <sup>1)</sup>			Dryer Configuration	Dimensions (in)							Weight lbs	Addl Wgt DMC <sup>2)</sup> lbs	No. of Cartridges
		Inlet (max)	Outlet (max)	Purge (max)		A	B	C	D	E	F	G <sup>2)</sup>			
IDW46N	1"	45	37.4	7.7	Simplex	25.74	13.50	12.20	2.99	1.97	24.00	4.00	101	1	2
IDW56N		55	45.7	9.4		28.97					28.00		112		
IDW75N		75	62.3	12.8		35.63					35.00		136		
IDW90N		90	74.7	15.3		40.43					40.00		154		
IDW110N		110	91.3	18.7		49.68					28.00		187		
IDW150N		150	124.5	25.5		62.75					35.00		231		
IDW180N		180	149.4	30.6		72.55					40.00		268		
IDW220N	1-1/2"	220	182.6	37.4	Duplex	46.69	19.25	2.44	28.00	339					
IDW300N		300	249.0	51.0		62.73			35.00	429					
IDW360N		360	298.8	61.2		72.54			40.00	495					

1) Stated flows are for an inlet pressure of 100 psig with reference to -4°F, 14.50 psia, 0% relative water vapor pressure. For flow at other pressures, apply the appropriate correction factors, terms, and dewpoint.

2) Additional height and weight are applicable to units equipped with dewpoint management control (DMC) and hygrometer. (G) is the projection of the hygrometer above the unit.

3) Simplex models have two desiccant columns (one per side) while duplex models have four (two per side).

4) To specify dewpoint management control, add "-D" after the model. To specify low dewpoint cartridges, add "-L" after the model. To specify both, add "-DL" after the model.

Standard pressure dewpoint	-40°F	
Optional pressure dewpoint	Standard cartridges	-4°F
	Low dewpoint cartridges <sup>4)</sup>	-100°F
Minimum working pressure	58 psig	
Maximum working pressure	188.5 psig	
Controller power	100-240VAC / 50/60 Hz / 1 ph or 24VDC <sup>5)</sup>	
Minimum inlet temperature	35°F	
Maximum inlet temperature	122°F	
Purge rate (average)	17%	

4) Low dewpoint cartridges are required for application where -94°F and -100°F dewpoints are required.

5) 24VDC controller with factory installed 100-240VAC / 50/60 Hz power supply with 115V plug.

6) Recommended pre-filtration: series AMH mist separator with pre-filter or series AM and AMD. Depending on pressure requirements, series AFW may need to be considered with the -EA element as the final stage.

7) A 1 micron post-filter is recommended to catch any desiccant fines, series AFF-D is recommended. Depending on pressure requirements, series AFW may need to be considered with the -E1 element.



Models IDW46N-IDW180N



Models IDW220N-IDW360N

## Dryer Correction Factors

Operating pressure (PCF)

psig	58	72	87	100	115	130	145	160	174	189
Mpa	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3
Correction factor	0.62	0.75	0.87	1	1.12	1.25	1.37	1.5	1.62	1.75

Temperature (TCF)

°F	68	77	86	95	104	113	122
°C	20	25	30	35	40	45	50
Correction factor	1.30	1.20	1.10	1.00	0.75	0.65	0.45

Pressure dewpoint (DCF) with standard cartridges

°F	-4	-22	-40
°C	-20	-30	-40
Correction factor	1.23	1.20	1.00

Pressure dewpoint (DCF) with low dewpoint cartridges

°F	-94	-100
°C	-70	-74
Correction factor	0.80	0.77

\*Always use the pressure correction factor (PCF) closest to the actual inlet pressure condition.

Corrected air flow rate = Required air flow rate / (PCF X TCF X DCF).

## Service Parts

Dryer Model	6,000 Hour Service Kit		12,000 Hour Service Kit (Standard)		12,000 Hour Service Kit (Low DP)	
	Part Number	Contents	Part Number	Contents	Part Number	Contents
IDW46N	IDWPD3SK01	Silencer kit (2 silencers)	IDW46DF-12000	Desiccant cartridges and associated seals, silencer service kit, cartridge removal tool	IDW46DF-12000-H	Low dewpoint desiccant cartridges and associated seals, silencer service kit, cartridge removal tool
IDW56N			IDW56DF-12000		IDW56DF-12000-H	
IDW75N			IDW75DF-12000		IDW75DF-12000-H	
IDW90N			IDW90DF-12000		IDW90DF-12000-H	
IDW110N	IDWPD3SK02		IDW110DF-12000		IDW110DF-12000-H	
IDW150N			IDW150DF-12000		IDW150DF-12000-H	
IDW180N			IDW180DF-12000		IDW180DF-12000-H	
IDW220N	IDWPD3SK03		IDW220DF-12000		IDW220DF-12000-H	
IDW300N			IDW300DF-12000		IDW300DF-12000-H	
IDW360N			IDW360DF-12000		IDW360DF-12000-H	

Dryer Model	24,000 Hour Service Kit (Standard)		24,000 Hour Service Kit (Low DP)	
	Part Number	Contents	Part Number	Contents
IDW46N	IDW46DF-24000	12,000 hour standard service kit, valve body stem, all associated seals	IDW46DF-24000-H	12,000 hour low dewpoint service kit, valve body stem, all associated seals
IDW56N	IDW56DF-24000		IDW56DF-24000-H	
IDW75N	IDW75DF-24000		IDW75DF-24000-H	
IDW90N	IDW90DF-24000		IDW90DF-24000-H	
IDW110N	IDW110DF-24000		IDW110DF-24000-H	
IDW150N	IDW150DF-24000		IDW150DF-24000-H	
IDW180N	IDW180DF-24000		IDW180DF-24000-H	
IDW220N	IDW220DF-24000		IDW220DF-24000-H	
IDW300N	IDW300DF-24000		IDW300DF-24000-H	
IDW360N	IDW360DF-24000		IDW360DF-24000-H	

Part Number	Description	Dryer Model
IDWPD3SKV024	24VDC solenoid valves	IDW46N~360N
IDWPD3SKS01	Shuttle service kit, simplex	IDW46N~180N
IDWPD3SKD01	Shuttle service kit, duplex	IDW220N~360N
IDWPD3CK024	24VDC controller with valves	IDW46N~360N
IDWPD3HK01	Hygrometer only	IDW46N~360N
IDWPD3HUK01	Hygrometer upgrade kit, required when upgrading standard unit to DMC type	IDW46N~360N
IDWPD3MSKS	Master seal kit, simplex	IDW46N~180N
IDWPD3MSKD	Master seal kit, duplex	IDW220N~360N