

### Technical parameters

#### IBW – water heater

- is intended for square pipes in connection with DIRECT AIR units
- the casing of the water heater is made of galvanized sheet metal
- aluminum slats on copper tubes
- the connection is a collet transition with a thread that is not included in the delivery or by soldering (see table)
- the heater is mounted approx. 1 m behind the fan
- if the heater is installed in front of the fan, it is necessary to determine whether the outlet air temperature does not exceed the permitted operating temperature of the fan
- maximum working pressure is 16 bar
- maximum operating temperature of 150 °C
- it is always necessary to use anti-freeze protection for supply units
- Unireg – heater regulator
- during assembly, it is necessary to remember to drain the hot water system and vent

Type	for fans IRB/IRT, IRAB(T)-N, IRB Ecowatt	B	H	I	K	M	Ø N	P
IBW 180	180	300	150	100	84	43	15	28
IBW 200	200	400	200	150	84	43	22	28
IBW 225	225	500	250	200	62	65	22	28
IBW 250	250	500	300	250	84	43	22	28
IBW 285	285	600	300	250	62	65	28	35
IBW 315	315	600	350	300	84	43	22	28
IBW 355	355	700	400	350	66	58	28	35
IBW 400	400	800	500	450	82	47	28	35
IBW 450	450	1,000	500	450	66	58	28	35

#### Accessories

- UNIREG heater regulator
- Transformer 60 transformer 230/24 V
- TGBK channel temperature sensor
- TGBR room temperature sensor
- TGBA antifreeze protection

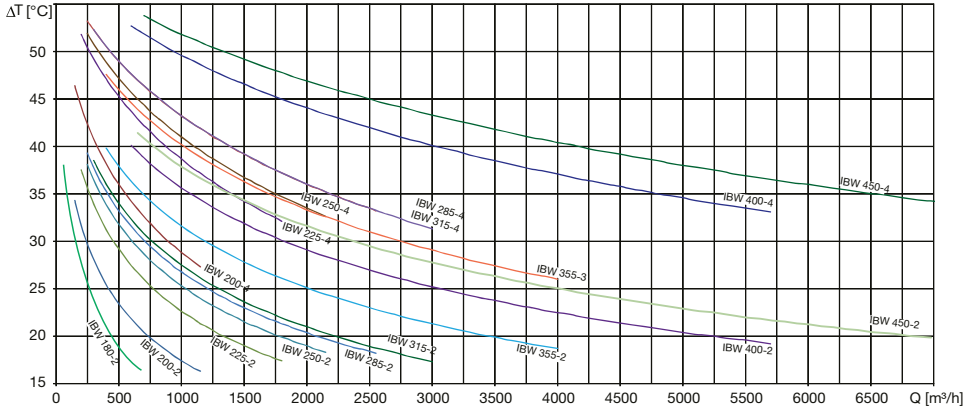
Type	fans IRB/IRT IRAB(T)-N	heat output		air values		water values 80/60 °C		water values 60/40 °C		connection	weight kg
		kW <sup>1</sup>	kW <sup>2</sup>	flow m <sup>3</sup> /h	pressure loss Pa	pressure loss kPa <sup>1</sup>	flow l/h <sup>1</sup>	pressure loss kPa <sup>2</sup>	flow l/h <sup>2</sup>		
IBW 180-2	180	4.9	3	400	–	4	210	–	–	1/2"	5.0
IBW 200-2	200	10.7	6.5	1,152	65	2	470	1	280	3/4"	8.0
IBW 200-4	200	17.3	10.8	1,152	129	3	760	1	470	3/4"	9.6
IBW 225-2	225	17.1	10.8	1,800	76	6	750	2	470	3/4"	8.8
IBW 225-4	225	29.7	19.9	1,800	129	8	1,300	4	870	3/4"	10.9
IBW 250-2	250	21.6	13.7	2,160	65	4	950	3	600	3/4"	12.2
IBW 250-4	250	35.9	24.2	2,160	129	10	1,580	5	1,050	1"	11.8
IBW 285-2	285	25.7	16.2	2,592	65	4	1,130	3	710	3/4"	13.1
IBW 285-4	285	43.4	29.4	2,592	129	10	1,910	6	1,280	1"	14.7
IBW 315-2	315	28.5	18.1	3,024	82	6	1,250	4	790	3/4"	14.1
IBW 315-4	315	48.2	32.5	3,024	164	13	2,120	8	1,420	1"	14.6
IBW 355-2	355	40.7	26.0	4,032	65	5	1,790	3	1,130	1"	14.6
IBW 355-3	355	55.0	36.0	4,032	97	6	2,410	5	1,570	1"	16.5
IBW 400-2	400	59.1	38.1	5,760	65	7	2,600	3	1,660	1"	18.2
IBW 400-4	400	96.3	65.1	5,760	129	10	4,230	7	2,840	1"	24.8
IBW 450-2	450	75.1	49.0	7,200	65	7	3,300	5	2,140	1"	20.3
IBW 450-4	450	122.0	82.6	7,200	129	14	5,370	8	3,640	1"	28.2

values apply to supply air at 0 °C and to water temperature gradients: <sup>1</sup> – temperature gradient 80/60 °C

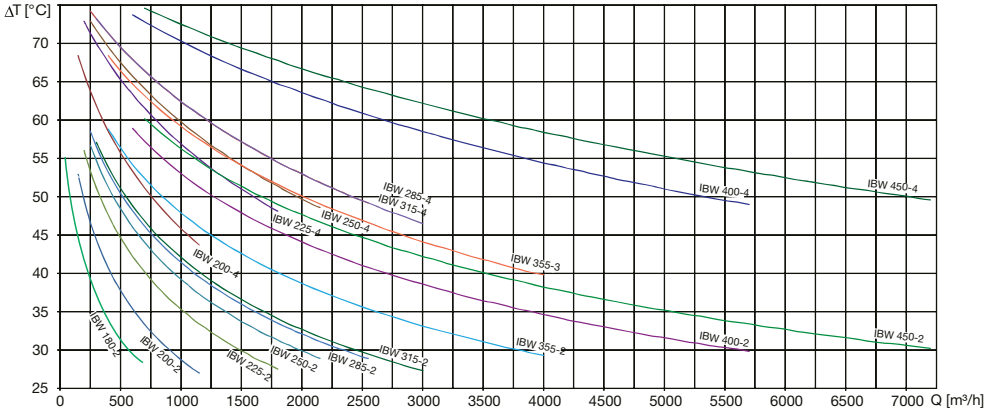
<sup>2</sup> – temperature gradient 60/40 °C

Characteristics

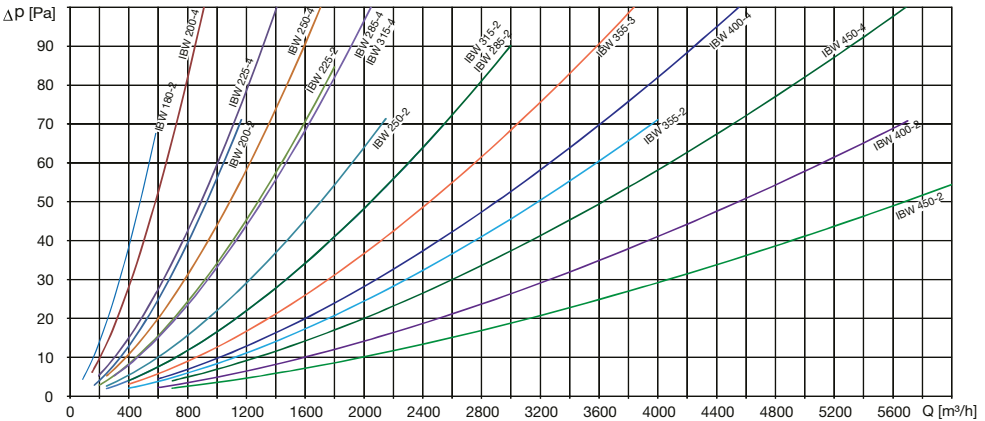
IBW – hot water heaters  $dT_w = 60/40^\circ\text{C}$



IBW – hot water heaters  $dT_w = 80/60^\circ\text{C}$



IBW – pressure losses



7<sup>1</sup>