

NAPPS Scroll Water Cooled Condensing Units

10 Models - 10 to 60 Tons



SWU Series – Water Cooled Condensing Units

- Advanced scroll compressor technology for higher efficiency and reliability
- Capacity controlled by cycling compressors and optional factory installed hot gas bypass
- ASME serviceable shell & tube condensers
- Factory installed and ship-loose options
- Optional 5 year extended compressor warranty
- Product safety tested, ETL listed & certified for US & Canada

Superior by Design

NAPPS SWU Dry Water Cooled Condensing Units are shipped with compressors charged with POE oil for 407C refrigerant applications.

State-of-the-Art

NAPPS SWU Series of Water Cooled Condensing Units include 10 models ranging in capacity from 10 to 60 tons. Each model is designed for quiet, high efficiency operation and built to withstand demanding continuous duty cycles. At the heart of the NAPPS SWU product line is the Trane 3-D® Scroll Compressor which is recognized worldwide as state-of-the-art in compressor technology.

Efficiency

The NAPPS SWU product offers full and part load efficiencies that are unmatched when compared to products utilizing reciprocating compressors. Still higher part-load efficiencies are realized as compressors are cycled for capacity control in 20 through 60 ton models.

Reliability

Since its introduction, Trane's 3-D® scroll compressor has proven to be one of most reliable compressors available. While high reliability is inherent with the 3-D® scroll technology, the life of the

compressor is also extended by maintaining close machine tolerances, rugged construction, aggressive safety control strategy and special design features such as the particle separator and the high volume oil sump.

Construction

All SWU products are assembled on a rugged 12 gauge galvanized steel base and painted with a topcoat of durable urethane enamel.

Condenser

All SWU products utilize **cleanable** and **serviceable** shell-and-tube condensers with enhanced copper tubes for high efficiency. Condensers are ASME code stamped and fitted with safety relief valve and ball type liquid line shut off valve.

Control

Terminal points are provided on all SWU products for connection of customer supplied temperature control. Multiple compressor units are configured to control capacity by cycling individual compressors, while single compressor units are configured for on/off operation. The factory installed hot gas bypass option can be utilized on single

compressor units (SWU-10 & 15) where reduced capacity is desired.

Control Panel

Control panels on all SWU products are complete with single point power connection terminal block, contactor and overload relay for each compressor, fused control power transformer, anti-recycle timer, reset relay, low and high pressure control, motor winding temperature protection, pump-out circuitry, summary fault terminal points and terminal points for other control options.

Warranty

All SWU products are backed by the **NAPPS Standard One Year Limited Warranty** with extended 5 year compressor warranty available as an option. Replacement compressors are available nationwide.

Options

Factory installed options for SWU products include hot gas bypass, gauge panel with individual gauge isolation valves, power supply monitor, non-fused through-the-door panel mounted disconnect and cycle counter/hour meter. Ship loose options include suction line ball valve, water regulating valve and unit vibration isolator kit.

NAPPS Scroll Water Cooled Condensing Units

Dimensions and Specifications

NAPPS Model #	Dimensions			Operating Weight	* Connection Sizes			Capacity Steps (%)	MCA @ 60 Hz, 3 ϕ	
	L	W	H		Liquid	Suction	Water		208/230 Volt	460 Volt
SWU-10	52"	28 1/2"	49 1/2"	620 lb.	7/8"	1 3/8"	1 1/4"	100	53	23
SWU-15	52"	28 1/2"	49 1/2"	697 lb.	7/8"	1 5/8"	1 1/4"	100	78	35
SWU-20	64"	28 1/2"	49 1/2"	875 lb.	1 1/8"	1 5/8"	2"	100/50	95	42
SWU-25	64"	28 1/2"	49 1/2"	952 lb.	1 1/8"	2 1/8"	2"	100/40	120	53
SWU-30	66"	28 1/2"	49 1/2"	1124 lb.	1 1/8"	2 1/8"	2 1/2"	100/50	140	63
SWU-35	66"	33 1/2"	61"	1327 lb.	1 3/8"	2 1/8"	2 1/2"	100/57/43	163	72
SWU-40	78"	33 1/2"	61"	1434 lb.	1 3/8"	2 5/8"	2 1/2"	100/63/37	183	81
SWU-45	69"	33 1/2"	61"	1621 lb.	1 3/8"	2 5/8"	3"	100/67/33	203	90
SWU-50	84"	33 1/2"	61"	1849 lb.	1 3/8"	2 5/8"	3"	100/70/40/30	225	99
SWU-60	84"	33 1/2"	61"	1983 lb.	1 3/8"	3 1/8"	3"	100/75/50/25	265	118

* All refrigerant connections are sweat, all water connections are FPT

Full Load Performance

Model # (number of compressors)	SST	Entering Condenser Water Temperature											
		75° F				85° F				95° F			
		Tons	EER	GPM	Δ P	Tons	EER	GPM	Δ P	Tons	EER	GPM	Δ P
SWU-10 (1 compressor)	30° F	9.5	15.9	27.7	10.8	9.0	13.8	27.0	9.8	8.6	11.9	26.7	9.6
	40° F	11.5	19.1	32.5	13.9	11.0	16.4	31.8	13.3	10.5	14.1	31.3	12.8
	50° F	13.7	22.3	38.0	18.6	13.0	19.2	36.9	17.1	12.6	16.3	36.4	16.7
SWU-15 (1 compressor)	30° F	14.0	15.6	41.0	15.6	13.4	13.4	40.5	14.8	12.6	11.3	39.2	13.9
	40° F	17.0	18.6	48.2	20.8	16.4	16.2	47.6	19.8	15.4	13.5	46.3	18.8
	50° F	20.4	21.9	56.6	28.0	19.4	18.7	55.1	25.9	18.4	15.9	53.8	24.6
SWU-20 (2 compressors)	30° F	18.3	14.9	54.1	6.0	17.5	12.7	53.2	5.6	16.5	10.7	52.1	5.4
	40° F	22.3	17.7	63.8	8.0	21.3	15.1	62.6	7.7	20.1	12.8	61.1	7.3
	50° F	26.5	20.5	74.2	10.6	25.3	17.5	72.6	10.1	24.0	14.8	71.0	9.6
SWU-25 (2 compressors)	30° F	22.8	14.5	67.5	7.2	21.8	12.6	66.4	6.9	20.4	10.6	64.6	6.5
	40° F	27.5	17.3	78.9	9.5	26.2	14.8	77.4	8.9	24.8	12.4	75.9	8.6
	50° F	32.9	20.0	92.3	12.6	31.2	17.0	89.9	11.8	29.7	14.7	87.9	11.3
SWU-30 (2 compressors)	30° F	27.5	14.9	81.1	5.0	26.0	12.7	79.1	4.8	24.5	10.7	77.5	4.6
	40° F	33.2	17.7	94.9	6.6	31.6	15.1	92.9	6.3	29.9	12.8	90.9	6.1
	50° F	39.6	20.6	110.9	9.1	38.1	17.8	108.8	8.4	36.0	15.1	105.9	7.9
SWU-35 (3 compressors)	30° F	31.6	14.6	93.5	6.4	29.9	12.4	91.5	6.2	28.2	10.5	89.9	5.9
	40° F	38.1	17.0	109.7	8.7	36.4	14.6	107.8	8.2	34.3	12.5	104.8	7.8
	50° F	45.4	20.0	127.6	11.6	43.4	17.1	124.8	10.8	41.3	14.5	122.5	10.4
SWU-40 (3 compressors)	30° F	36.0	14.8	106.4	9.4	34.3	12.5	104.8	8.9	32.4	10.6	102.6	8.6
	40° F	43.7	17.2	125.8	12.7	41.7	14.9	122.9	11.8	39.6	12.6	120.8	11.4
	50° F	52.3	20.3	146.6	16.5	49.4	17.3	142.1	15.2	47.0	14.7	139.0	14.6
SWU-45 (3 compressors)	30° F	40.5	14.7	119.8	5.1	38.4	12.5	117.4	4.7	36.4	10.6	115.6	4.6
	40° F	49.0	17.2	141.1	6.8	46.6	14.9	137.5	6.3	44.1	12.6	134.6	6.0
	50° F	58.5	20.2	164.0	8.9	55.6	17.3	159.8	8.2	53.2	14.9	156.9	7.9
SWU-50 (4 compressors)	30° F	45.4	14.9	133.9	6.9	43.4	12.8	131.8	6.7	40.9	10.8	129.1	6.4
	40° F	55.2	17.8	157.9	9.2	52.3	15.2	153.6	8.5	49.8	12.9	151.2	8.3
	50° F	65.4	20.6	183.0	12.1	63.0	17.9	179.9	11.3	59.6	15.2	175.2	10.7
SWU-60 (4 compressors)	30° F	53.9	14.7	159.6	9.4	51.1	12.5	156.1	8.8	48.3	10.6	153.2	8.5
	40° F	65.0	17.2	187.0	12.4	62.1	14.9	183.2	11.9	58.8	12.6	179.4	11.4
	50° F	78.1	20.2	219.1	16.7	74.3	17.3	213.7	15.6	70.3	14.6	208.3	14.8

* All R-407C data above is estimated from ratings based on 60 Hz, R-22 refrigerant, 15°F suction superheat, 15°F liquid subcooling and 10°F temperature rise through the condenser per ARI standard 365-87

* Δ P = Water-side pressure drop in feet of water



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For more information, contact your local Trane sales

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