



General Data

TWE

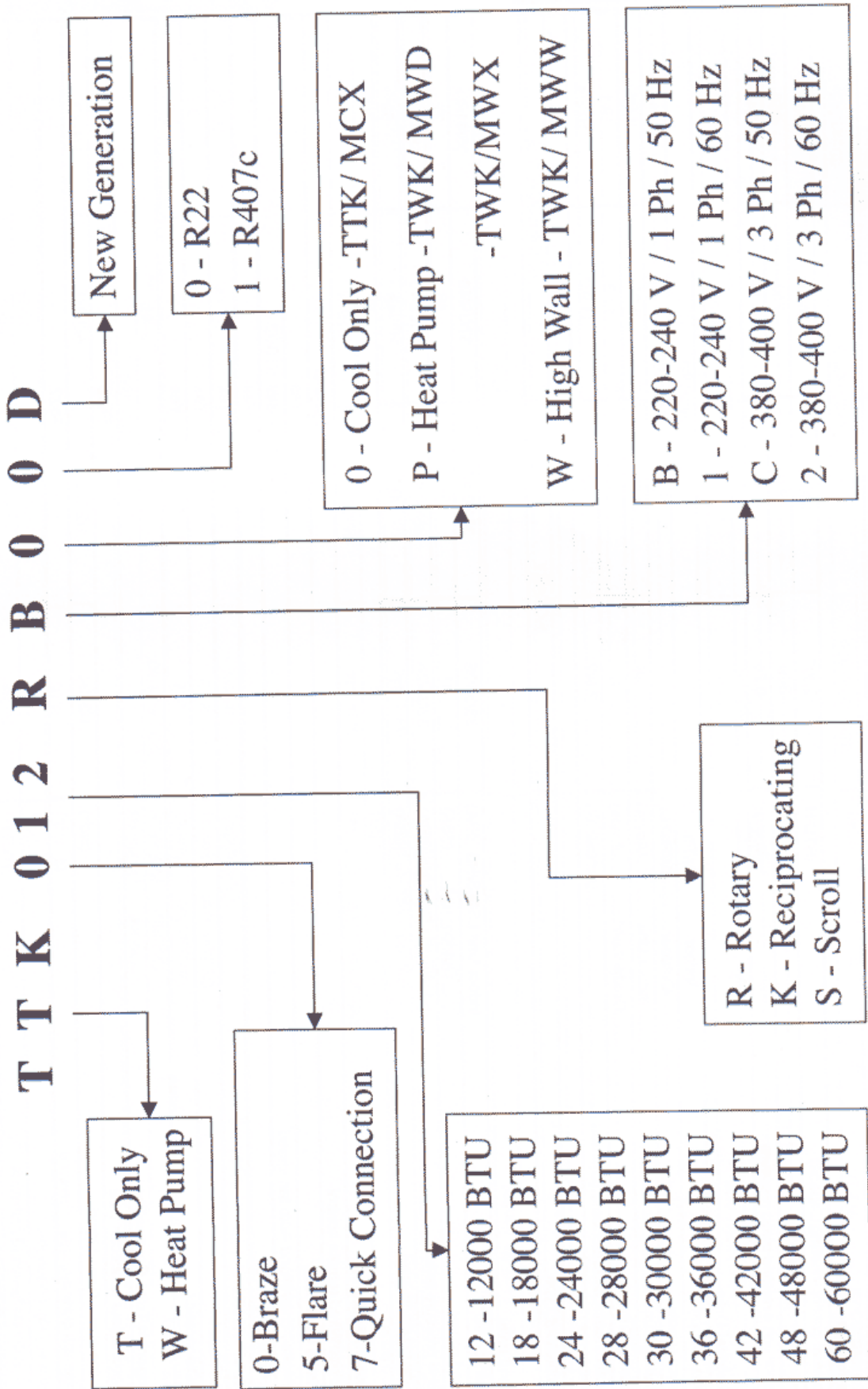
TWE Product Specifications

Model	TWE030CA40B	TWE040CA40C	TWE050CA50D
Power Conn.— Volts/Ph/Hz	220/1/50	220/1/50	220/1/50
Indoor Coil - Type	Plate Fin	Plate Fin	Plate Fin
Rows	3	3	3
Fins per inch (Fins per 25.4 mm)	14	14	14
Face Area sq ft (sq m)	3.21 (.30)	5.04 (.47)	6.19 (.58)
Tube Size in. (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Refrigerant Control	FCCV	FCCV	FCCV
Drain Conn. Size in. (mm)	3/4 NPT	3/4 NPT	3/4 NPT
Duct Connections	See Outline Drawing	See Outline Drawing	See Outline Drawing
Indoor Fan - Type	Centrifugal	Centrifugal	Centrifugal
No. Used	1	1	1
Diameter in. (mm)	10.0 (254.0)	10.0 (254.0)	11.0 (279.4)
Width in. (mm)	8.0 (203.2)	10.0 (254.0)	10.0 (254.0)
Type Drive - No. Speeds	Direct - 3	Direct - 3	Direct - 3
Airflow (High)			
CFM @ 0.0 in. w.g.	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table
CMH @ 0.0 Pa	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table
No. Motors - HP	1 - 1/3	1 - 1/3	1 - 3/4
Motor RPM	1000	900	900
Volts/Ph/Hz	220/1/50	220/1/50	220/1/50
F.L. Amps	2.6	2.1	4.5
L.R. Amps	3.3	4.2	10.1
Filters			
Vertical Applications			
Filter Furnished	Yes	Yes	Yes
Type Furnished	Throwaway	Throwaway	High Velocity
No.-Size-Thickness	1 - 20 x 20 - 1	1 - 20 x 20 - 1	1 - 22 x 20 - 1
Horizontal Applications			
Filter Furnished	No	No	No
Type Recommended	See Note Below	See Note Below	See Note Below
No.-Size-Thickness	See Note Below	See Note Below	See Note Below
Refrigerant Line Size			
Line Size ID Gas in. (mm)	7/8 (22.23)	1-1/8 (28.56)	1-1/8 (28.56)
Line Size ID Liquid in. (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Dimensions (H x W x D)			
Crated - in.	44.5 x 24.0 x 23.5	53.25 x 26.0 x 23.5	59.5 x 26.0 x 23.5
- (mm)	(1130 x 610 x 597)	(1353 x 660 x 597)	(1511 x 660 x 597)
Uncrated - in.	43.0 x 21.5 x 21.0	52.0 x 23.5 x 21.0	58.0 x 23.5 x 21.0
- (mm)	(1092 x 546 x 533)	(1321 x 597x 533)	(1473 x 597 x 533)
Weight lbs. (kg)			
Shipping	125 (56.7)	165 (74.8)	198 (898)
Net	115 (52.2)	150 (68.0)	183 (83.0)

Minimum filter size for horizontal applications based on airflow selection and calculated as follows:

Low Velocity Filter: Face Area (sq ft) = CFM/300
 High Velocity Filter: Face Area (sq ft) = CFM/500

TTK Model Nomenclature



If TTK, then automatically the 9th digit is "cool only" (0)





Outdoor Unit Specifications

TTK

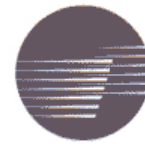
Model Capacity/BTU	12,000	18,000	24,000	30,000
OUTDOOR COIL - TYPE	Wavy 3B	Wavy 3B	Wavy 3B	Wavy 3B
Row/FPI	1/15	2/15	2/15	2/15
Face Area (sq.ft.)	2.29	4.54	4.54	7.05
Tube Type/Tube size (in.)	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"
No.of Refrigerant Circuit	1	1	1	2
Refrigerant / (Kg)	R 22 / 1.18	R 22 / 1.9	R 22 / 2.5	R 22 / 3.57
Ref.Line Connection	Flare	Flare	Flare	Flare
COMPRESSOR				
Type	Rotary	Rotary	Reciprocating	Reciprocating
Volts/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50
R.L. Amps	6	8	14	17.5
L.R.Amps	31	43	58	85.8
Refrigerant	R22	R22	R22	R22
Oil Used	MS-56	MS-32N1	MS-32N1	SS-MIN
Outdoor Fan -Type	Propeller	Propeller	Propeller	Propeller
Diameter (in.) - No.Used	16 - 1	18 - 1	18 - 1	20 - 1
Pitch Angle (Degree)	25	25	25	30
Drive Type - No. speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 in w.g.	1490	1360	1360	2130
No.Motors - HP	1 - 1/15	1 - 1/15	1 - 1/15	1 - 1/6
Motors Speed RPM	930	930	930	900
R.L.Amps	0.46	0.46	0.46	0.9
L.R. Amps	0.98	0.98	0.98	2.04
CAPACITORS				
Running Capacitor				
Capacitance /(MFD/V)	30/370	45/370	45/440	50/440
Tolerance (%)	6	6	5	6
Starting Capacitor				
Capacitance /(MFD/V)	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾	189-227 /220
CONTACTOR				
Volts/Amps/Poles	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2

⁽¹⁾ Does not apply

TTK

Model Capacity/BTU	36,000	42,000	48,000	60,000
OUTDOOR COIL - TYPE	Wavy 3B	Wavy 3B	Wavy 3B	Wavy 3B
Row/FPI	2/15	2/20	2/20	2/20
Face Area (sq.ft.)	7.05	7.05	11.28	11.28
Tube Type/Tube size (in.)	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"
No.of Refrigerant Circuit	2	2	6	6
Refrigerant / (Kg)	R 22 / 3.78	R 22 / 3.3	R 22 / 3.5	R 22 / 4.5
Ref.Line Connection	Flare	Braze	Braze	Braze
COMPRESSOR				
Type	Reciprocating	Reciprocating	Reciprocating	Reciprocating
Volts/Ph/Hz	220-240/1/50	380/3/50	380 / 3 / 50	380 / 3 / 50
R.L. Amps	22	5.9	8.6	10.2
L.R.Amps	105	42	55	65
Refrigerant	R22	R22	R22	R22
Oil Used	SS-MIN	SS-MIN	70-MIN	70-MIN
Outdoor Fan -Type	Propeller	Propeller	Propeller	Propeller
Diameter (in.) - No.Used	20 - 1	20 - 1	18 - 2	18 - 2
Pitch Angle (Degree)	30	30	25	25
Drive Type - No. speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 in w.g.	2130	2130	1360	1360
No.Motors - HP	1 - 1/6	1 - 1/6	2 - 1/15	2 - 1/15
Motors Speed RPM	900	900	930	930
R.L.Amps	0.9	0.9	0.46	0.46
L.R. Amps	2.04	2.04	0.98	0.98
CAPACITORS				
Running Capacitor				
Capacitance /(MFD/V)	45/440	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾
Tolerance (%)	6	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾
Starting Capacitor				
Capacitance /(MFD/V)	189-227 /330	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾
CONTACTOR				
Volts/Amps/Poles	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2

⁽¹⁾ Does not apply



Outdoor Unit Specifications

TWK-P (Heat Pump)

Model Capacity/BTU	12,000	18,000	24,000	30,000
OUTDOOR COIL - TYPE	Wavy 3B	Wavy 3B	Wavy 3B	Wavy 3B
Row/FPI	1/15	2/15	2/15	2/15
Face Area (sq.ft.)	2.29	4.54	4.54	7.05
Tube Type/Tube size (in.)	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"
Refrigerant Control	Orifice SZ. 38/35	Orifice SZ. 49/40	Orifice SZ. 53/49	Orifice SZ. 60/72
No.of Refrigerant Circuit	1	4	4	4
Refrigerant / (Kg)	R 22 / 1.18	R 22 / 1.4	R 22 / 1.65	R 22 / 2.4
Ref.Line Connection	Flare	Flare	Flare	Flare
COMPRESSOR				
Type	Rotary	Rotary	Reciprocating	Reciprocating
Volts/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	220-240/1/50-60
R.L. Amps	6	8	14	17.5
L.R.Amps	31	43	58	85.8
Refrigerant	R22	R22	R22	R22
Oil Used	MS-56	MS-32N1	MS-32N1	SS-MIN
Outdoor Fan -Type	Propeller	Propeller	Propeller	Propeller
Diameter (in.) - No.Used	16 - 1	18 - 1	18 - 1	20 - 1
Pitch Angle (Degree)	25	25	25	30
Drive Type - No. speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 in w.g.	1490	1360	1360	2130
No.Motors - HP	1 - 1/15	1 - 1/15	1 - 1/15	1 - 1/6
Motors Speed RPM	930	930	930	900
R.L.Amps	0.46	0.46	0.46	0.9
L.R. Amps	0.98	0.98	0.98	2.04
CAPACITORS				
Running Capacitor				
Capacitance /(MFD/V)	30/370	45/370	45/440	50/440
Tolerance (%)	6	6	5	6
Starting Capacitor				
Capacitance /(MFD/V)	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾	189-227 /220
CONTACTOR				
Volts/Amps/Poles	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2

⁽¹⁾ Does not apply

TWK-P (Heat Pump)

Model Capacity/BTU	36,000	42,000	48,000	60,000
OUTDOOR COIL - TYPE	Wavy 3B	Wavy 3B	Wavy 3B	Wavy 3B
Row/FPI	2/15	2/20	2/20	2/20
Face Area (sq.ft.)	7.05	7.05	11.28	11.28
Tube Type/Tube size (in.)	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"	Inner grooved- 3/8"
Refrigerant Control	Orifice SZ. 60/72	Expansion Valve 4T	Expansion Valve 4T	Expansion Valve 5T
No.of Refrigerant Circuit	4	4	6	6
Refrigerant / (Kg)	R 22 / 2.6	R 22 / 3.3	R 22 / 3.5	R 22 / 4.5
Ref.Line Connection	Flare	Braze	Braze	Braze
COMPRESSOR				
Type	Reciprocating	Reciprocating	Reciprocating	Reciprocating
Volts/Ph/Hz	220-240/1/50-60	380 / 3 /50	380 / 3 /50	380 / 3 /50
R.L. Amps	22	5.9	8.6	10.2
L.R.Amps	105	42	55	65
Refrigerant	R22	R22	R22	R22
Oil Used	SS-MIN	70-MIN	70-MIN	70-MIN
Outdoor Fan -Type	Propeller	Propeller	Propeller	Propeller
Diameter (in.) - No.Used	20 - 1	20 - 1	18 - 2	18 - 2
Pitch Angle (Degree)	30	30	25	25
Drive Type - No. speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 in w.g.	2130	2130	1360	1360
No.Motors - HP	1 - 1/6	1 - 1/6	2 - 1/15	2 - 1/15
Motors Speed RPM	900	900	930	930
R.L.Amps	0.9	0.9	0.46	0.46
L.R. Amps	2.04	2.04	0.98	0.98
CAPACITORS				
Running Capacitor				
Capacitance /(MFD/V)	45/440	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾
Tolerance (%)	6	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾
Starting Capacitor				
Capacitance /(MFD/V)	189-227 /330	DNA ⁽¹⁾	DNA ⁽¹⁾	DNA ⁽¹⁾
CONTACTOR				
Volts/Amps/Poles	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2	220 / 30 / 2

⁽¹⁾ Does not apply