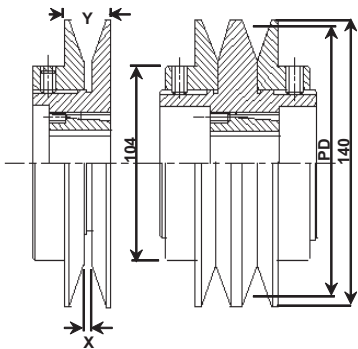**UATYQ250,350,450,550,600,700CY1**

Motor Pulley Dimensions:

(Note: All dimensions are in mm)

"Models R410A Rooftop (UATYQ-MCY1)"	Pulley Type	PD		Total Length	Quantity (pcs)
		Medium	Min - Max		
250	VPT139A1	121	109 - 133	35	1
350	VPT139A1	121	109 - 133	35	1
450	VPT139A2	121	109 - 133	70	2
550	VPT139A2	121	109 - 133	70	2
600	VPT139A2	121	109 - 133	70	2
700	VPT139A2	121	109 - 133	70	2

Legend: PD: Pitch Diameter of Motor Pully (mm)

V-Belt Dimensions:

(Note: All dimensions are in mm)

SPA
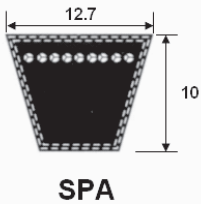
"Models R410A Rooftop (UATYQ-MCY1)"	Section	Top Width	Thickness	Angle (°)	Side flow		Down flow		Quantity (pcs)
					V-belt length	Pulley center distance(mm)	V-belt length	Pulley center distance(mm)	
					Nominal		Nominal		
250	A	12,7	10	40	1657	510	1382	375	1
350	A	12,7	10	40	1782	590	1357	388	1
450	A	12,7	10	40	1657	515	1250	375	2
550	A	12,7	10	40	1932	710	1382	445	2
600	A	12,7	10	40	1957	710	1382	445	2
700	A	12,7	10	40	1907	690	1382	435	2

Example for selection process:

The following data are the rated design points for model R410A rooftop UATYQ250MCY1:
Airflow Rate = 3300 cfm
External Static Pressure (ESP) = 150Pa
Blower RPM = 657

To increase the ESP to 200Pa, but maintain the airflow rate at 3300cfm, please follow the steps below:

Step 1:   Selection of new desired point.
From the blower curve, select the point that can meet both of the requirements (ESP = 200Pa and airflow rate = 3300cfm).

Step 2:   Read RPM value from the blower curve.
Next, refer to the RPM value in the blower curve which is corresponding to this point.
For instance, from the blower curve on the right, RPM which is corresponding to this point = 727.

Step 3:   Read power consumption value for indoor fan motor.
Then, use this RPM value to estimate the power consumption of indoor fan motor by referring to the table of 'Motor Variable Pitch Pulley Data'.
For instance, from the table, indoor fan motor with 727RPM consumes 1000W.

Step 4:   Read number of turns for variable pitch pulley.
Similarly, use this RPM value to read the no. of turns (N) by referring to the table of 'Motor Variable Pitch Pulley Data'. The variable pitch pulley for motor shall be adjusted to this 'N' in order to achieve the desired point (ESP = 200Pa and airflow rate = 3300cfm).
For instance, from the table, no. of turns (N) = 1.5 in order to get 727RPM. First, adjust the motor pulley to 0 turns. Then, makes 1 and half turns on the pulley. Cross check the dimension 'X', which stands for regulation space of motor pulley. In this case, X = 3.5mm.

UATYQ250 - blower curve

Note: The shaded ▮ area indicates the operating range of variable pitch pulley which is used with standard motor (factory fitted). In case if the operation is out of range, change pulley or/and motor size.