

Thermostat



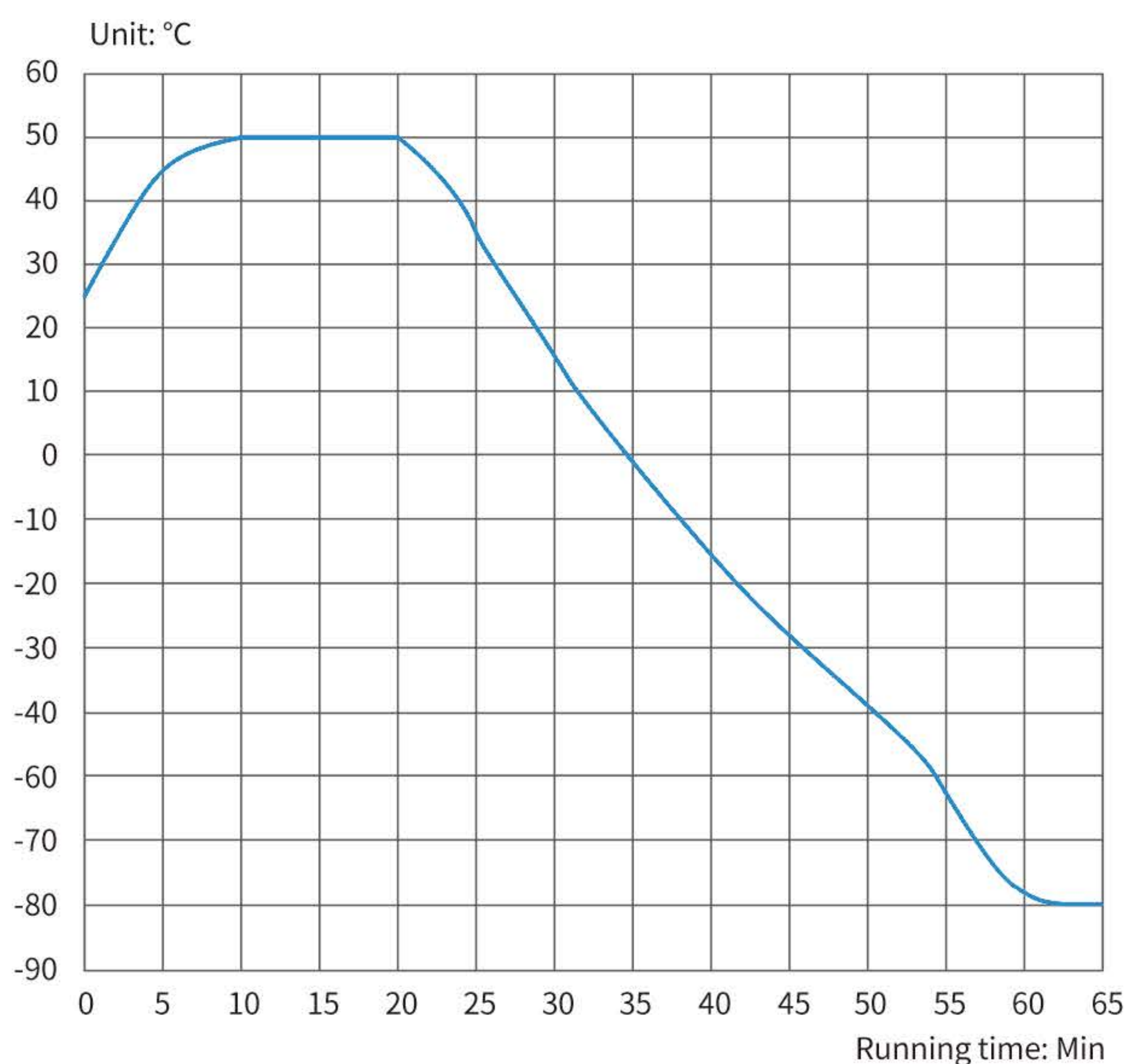
How It Works

The medium in the reaction vessel is cooled to the required low temperature by the refrigeration system, while the temperature stability is maintained by the heating system and the temperature control system, and the stirring system can make the medium evenly mixed.

Features

- Temp. range -120°C~ 99°C; accuracy is $\pm 0.1^{\circ}\text{C}$.
- Temp. setting and display adopt digital mode for easy monitoring.
- The diameter of the slot cover can be adjusted to reduce the loss of refrigerant during operation.
- Equipped with an external component fixing bracket, it is convenient to install the burette, external sensor, etc.

Test Curve



DFY-5/80 Heating And Cooling Curve
(no load / ambient temp. 25°C)

Parameters

Model number		DFY-1800	DFY-10/40	DFY-20/40	DFY-20/80	DFY-50/80	DFY-10/120	DFY-20/120
Temp.range (°C)		-80°C~99°C	-40°C~99°C		-80°C~99°C		-120°C~99°C	
Power supply		220V~50Hz						
Heating power (kW)		0.5	2	3	3	4	2	3
Total power (kW)		1.9	3.3	6.25	9.2	15	6.38	9.4
Cooling capacity (kW)	0°C	1.65	2.5	5.5	7.5	12	4.1	8.5
	-40°C	1.4	0.55	0.8	5.5	8.5	3.2	3.2
	-80°C	0.55	N/A		0.95	0.9	1.2	1.2
	-120°C	N/A					0.45	0.35
Temperature sensor		PT100 ±0.1°C						
Safety protection		Overvoltage, time delay, overcurrent, overheating, leakage						
Tank volume (L)		4	10	20	20	50	10	20
Reservoir size (mm)		180*160	300*220	350*250	350*250	400*400	300*220	350*250
Notch size (mm)		160	240	320	320	320	240	320
Outer circulation pipe size		DN-10mm	DN-10mm	DN-10mm	DN-10mm	DN-6mm	DN-6mm	DN-6mm
Condenser type		Air Cooled/Axial Fan						
Compressor power (kW)		1.36	1.12	3	6	10.5	3.375	9
Compressor current (A)		4.1	5.1	6	12	21	16	18
Refrigerant		R404A/R23	R404A		R404A/R23	R404A/R23	R404A/R23/F14	
Lift (m)		6	6	6	6	6	35	35
Rated flow (L/min)		10	25	25	25	25	12	12
Appearance size (mm)		640*440*560	550*480*850	630*530*100	860*660*105	970*670*130	970*770*110	1050*770*105
Weight (kg)		77	90	130	190	N/A	240	373
Optional PLC	Control system	Siemens S7-200 smart PLC						
	Programming	Can write 5 programs, each with up to 40 steps						
	Control model	The material temperature and equipment outlet temperature can be switched independently						
	Communication protocol	Modbus RTU protocol RS485 interface (optional RS232 Ethernet)						
	Operation panel	7-inch Siemens color touch screen (optional 10 inch)						
	Data export	Support for USB data export, can export temperature data in TXT format						
	Installation List	Two sets of valves, one roll of Thread seal tape/two stainless steel insulation hoses/one operation manual						