

Newest small-size·mid-size standard chiller

Dynacool is the most efficient unit to achieve high-cycle molding & consistent molding, as Dynacool can supply mediums under accurate temperature to every corners of the mold.
Operability and visibility are improved by adopting a touch panel.

(Indoor type)

Model ※1		KCWS-03Li	KCWS-05Li	KCWS-10Li	KCWS-15Li	KCWS-20Li
Medium temperature range		6°C~30°C				
Medium		Water				
Chilling capacity(kW) 50/60Hz	10°C	13.3	19.2	33.6	52.8	67.2
	15°C	15.8	22.6	37.3	59.9	74.6
Tank capacity (ℓ)		60	75	140	250	300
Compressor out put (kW)		2.8	3.65	6.46	6.46+3.65	6.46×2
Refrigerant		R410A				
Internal circ. pump 50/60Hz 出力 Output (kW)		-				
Medium circ. pump 50/60Hz	Output (kW)	1.27/2.2		2.3/4		4.0/5.5
	High-efficiency motor					
	Max. flow rate (ℓ/min)	105/126		250/265		367/433
Max. output pressure (MPa)		0.45/0.51		0.48/0.69		0.54/0.57
Pipe connection size	Medium process Medium return	1B(Valve)		1½B(Socket)	2B(Socket)	
	Cooling water inlet	¾B(Socket)	1B(Socket)	1½B(Socket)	2B(Socket)	
	Cooling water outlet	¾B(Socket)	1B(Socket)	1½B(Globe valve)	2B(Globe valve)	
	Water supply	½B(Socket)				
	Drain	¾B(Ball valve)			1B(Ball valve)	
	Over flow	1B(Socket)				
	Drain for drain pan	½B(Socket)			1B(Socket)	
	Inlet of compressed air	φ6Tube fitting			φ6Tube fitting	
Utility	Cooling water volume (ℓ / min) ※2	41	56	111	167	222
	Supplying pressure of compressed air (MPa)	0.4~0.8		0.4~0.8		
	Supplying volume of compressed air (Nℓ/min)	≥6		≥6		
	Weight (kg)	210	225	500	800	1000
	Electricity (kVA)	8.15	9.1	17.1	23.2	30.7
	Breaker (AT)	30		60	75	100
	Power source	AC200V 50/60Hz·AC220V 60Hz 3φ 3W				
Paint color	Nittoko N-93 Full gloss paint					
Alarm	Medium short, Pump overload, Chiller high pressure alarm, Chiller low pressure alarm, Freezing alarm, Chiller over-heat,Temp.high alarm, Temp.low alarm, Sensor error, Reverse phase, Inverter error					
Options	※3			※4		
Dynakleen·N Deo	Options			Standard		
Dimensions (W×D×Hmm)	550×655×1300			1020×800×1635	1300×1000×1685	1500×1100×1985

※1 Li-2P type is also available, which includes chilled water pump to KCWS-10Li~20Li.

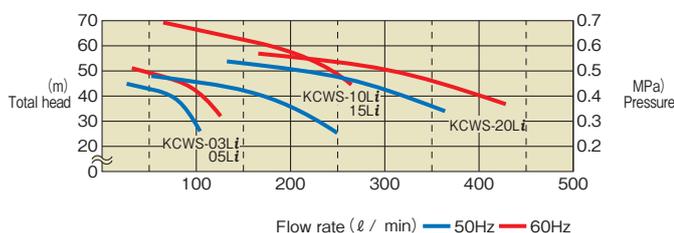
※2 Cooling water volume is figured at 7°C of chilling water, 30°C of inlet cooling water and 35°C outlet cooling water.

1kW=860kcal/h
1MPa=10.197kg/cm²

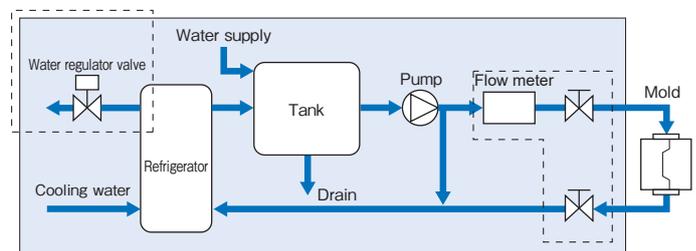
※3 Hose, Signal light, Nominated-color, Different voltage

※4 Branch pipe, Hose, Signal light, Nominated-color, Different voltage

❖ Performance curve of medium flow rate (KCWS-03Li~20Li)



❖ Flow-chart (KCWS-03Li~20Li)



A larger capacity standard chiller to control a number of Injection molding machines together

This concept is the Centralized chilling water control system to feed cooling water either to all machines in the factory or to each group of machines.

Operability and visibility are improved by adopting a touch panel.

(Indoor type)

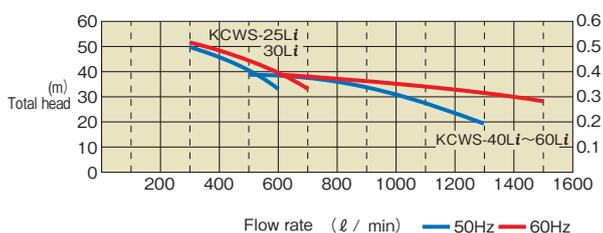
Model		KCWS-25Li	KCWS-30Li	KCWS-40Li	KCWS-50Li	KCWS-60Li
Medium temperature range		6°C~30°C				
Medium		Water				
Chilling capacity(kW) 50/60Hz	10°C	86.4	100.8	134.4	168.0	201.6
	15°C	97.2	111.9	149.2	186.5	223.8
Tank capacity (ℓ)		350		500	650	
Compressor out put (kW)		6.46×2+3.65	6.46×3	6.46×4	6.46×5	6.46×6
Refrigerant		R410A				
Internal circ. pump 50/60Hz		0.75/0.75		1.5/1.5		1.5/2.2
Output (kW)		High-efficiency motor				
Medium circ. pump 50/60Hz	Output (kW)	5.5/7.5		7.5/11		
	High-efficiency motor					
	Max. flow rate (ℓ/min)	600/700		1300/1500		
Max. output pressure (MPa)		0.54/0.54		0.4/0.4		
Pipe connection size	Medium process Medium return	2 ¹ / ₂ B(Socket)		4B(Socket)		
	Cooling water inlet	2 ¹ / ₂ B(Socket)		3B(Socket)	4B(Socket)	
	Cooling water outlet	2 ¹ / ₂ B(Globe valve)		3B(Socket)	4B(Socket)	
	Water supply	1 ¹ / ₂ B(Socket)		1B(Socket)		
	Over flow	To be with Drain {1B(Socket)}				
	Drain for drain pan	1B(Socket)				
	Inlet of compressed air	φ6Tube fitting				
Utility	Cooling water volume (ℓ/min) ※1	278	333	444	555	666
	Supplying pressure of compressed air (MPa)	0.4~0.8				
	Supplying volume of compressed air (Nℓ/min)	≥6				
	Weight (kg)	1400	1500	2200	2500	2800
	Electricity (kVA)	40.6	46.5	63.5	75.5	88.4
	Breaker (AT)	150		225	250	300
	Power source	AC200V 50/60Hz·AC220V 60Hz 3φ 3W				
Paint color	Nittoko N-93 Full gloss paint					
Alarm	Medium short, Pump overload, Chilled water short, Chiller high pressure alarm, Chiller low pressure alarm, Freezing alarm, Chiller over-heat,Temp.high alarm, Temp.low alarm, Sensor error, Reverse phase, Inverter error					
オプション Options	※2					
Dynakleen・N Deo	Standard					
Dimensions (W×D×Hmm)	2225×1150×1800		2700×1300×1800	3200×1300×1800		

※1 Cooling water volume is figured at 7°C of chilling water, 30°C of inlet cooling water and 35°C outlet cooling water.

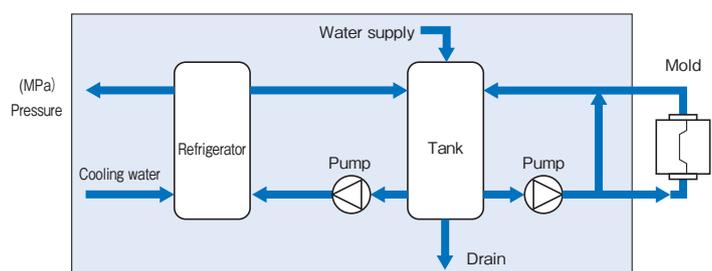
1kW=860kcal/h
1MPa=10.197kg/cm²

※2 Branch pipe, Hose, Signal light, Nominated-color, Different voltage

❖ Performance curve of medium flow rate (KCWS-25Li~60Li)



❖ Flow-chart (KCWS-25Li~60Li)



Extremely compact design... Best sale compact-size chilling-heating unit

This unit can be installed to each molding machines independently, just like mold temperature controller. Operability and visibility are improved by adopting a touch panel. An energy-saving effect of 30% at the maximum is got by automatic control of water temperature in a water cooler.

(Indoor type)

Model ※1	KCW-01HL ※7	KCWS-03HLi	KCWS-05HLi	KCWS-03HLi2	KCWS-05HLi2
Medium temperature range	10°C~95°C	8°C~95°C			
Medium	Water				
Chilling capacity(kW) 50/60Hz	10°C	2.8/3.3	13.3	19.2	13.3
	15°C	3.3/3.8	15.8	22.6	15.8
Tank capacity (ℓ)	—	30	40	42	
Compressor out put (kW)	0.9	2.8	3.65	2.8	3.65
Refrigerant	R407C		R410A		
Internal circ. pump 50/60Hz Output (kW)	0.15/0.25	0.74/0.74	0.74/1.28		
			High-efficiency motor		
Medium circ. pump 50/60Hz	Output (kW)	0.15/0.25	0.74/0.74	1.27/2.2	0.74×2/0.74×2
	Max. flow rate (ℓ/min)	20/20	72/86	105/126	72×2/86×2
	Max. output pressure (MPa)	0.3/0.4	0.44/0.38	0.45/0.51	0.44×2/0.38×2
Heater capacity (kW)	3(2.7~3.3)	6(5.4~6.6)	9(8.2~9.9)	6(5.4~6.6)×2	
Pipe connection size	Medium process Medium return	φ10.5×2 Hose Nipple	1B(Valve)		1B(Valve)2-way
	Cooling water inlet	3/4B(Socket)		1B(Socket)	3/4B(Socket)
	Cooling water outlet	3/4B(Socket)		1B(Socket)	3/4B(Socket)
	Water supply	—	1/2B(Socket)		
	Drain	—	3/4B(Ball valve)		1B(Socket)
	Over flow	—	1B(Socket)		Tank Drain
	Drain for drain pan	1/2B(Socket)			
Utility	Cooling water volume (ℓ/min) ※2	14.0/17.4	41	56	41
	Weight (kg)	120	235	260	330
	Electricity (kVA)	6	14.4	21.1	23.1
	Breaker (AT)	30	50	63	75
	Power source	AC200V 50/60Hz·AC220V 60Hz 3φ 3W			
Paint color	Nittoko N-93 Full gloss paint				
Alarm	※3	※4			
Options	※5	※6			
Dynakleen·N Deo	—	Options			
Dimensions (W×D×Hmm)	300×700×900	550×655×1300		450×1150×1425	

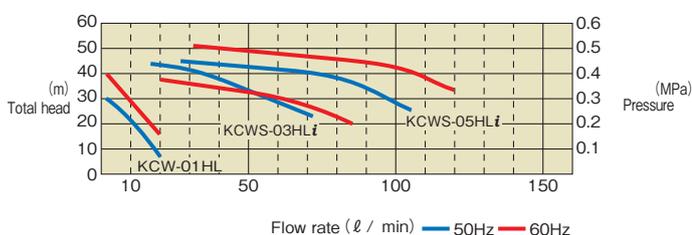
※1 HL-P type is available having upgraded medium circ. pump.

※2 Cooling water volume is figured at 7°C of chilling water, 30°C of inlet cooling water and 35°C outlet cooling water.

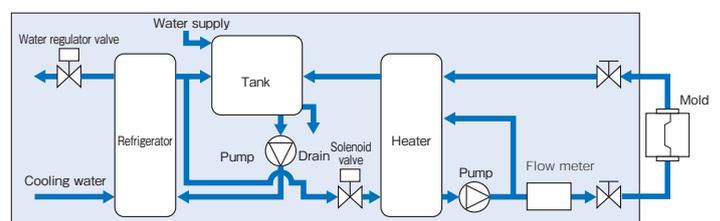
1kW=860kcal/h
1MPa=10.197kg/cm²

- ※3 Medium short, Pump overload, Chiller high pressure alarm, Chiller low pressure alarm, Freezing alarm, Chiller over-heat, Temp.high alarm, Temp.low alarm, Sensor error, Reverse phase, Inverter error
- ※4 Medium short, Pump overload, Chilled water short, Chiller high pressure alarm, Chiller low pressure alarm, Freezing alarm, Chiller over-heat, Temp.high alarm, Temp.low alarm, Sensor error, Reverse phase, Inverter error
- ※5 Hose, Signal light, Nominated-color, Different voltage, Indirect cooling type(city water or well water)
- ※6 Hose, Signal light, Nominated-color, Different voltage
- ※7 KCW-01HL is not a chiller inverter control.

❖ Performance curve of medium flow rate (KCW-01HL~KCWS-05HLi)



❖ Flow-chart (KCWS-03HLi ~ 05HLi)



This unit can control wide range of temperature

Mid-size chilling-heating unit

Single unit can control wide range of temperature control from scope of chiller to that of temperature controller!
 Operability and visibility are improved by adopting a touch panel. An energy-saving effect of 30% at the maximum is got by automatic control of water temperature in a water cooler.

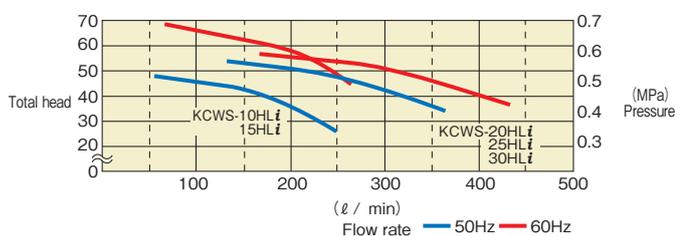
(Indoor type)

Model		KCWS-10HLi	KCWS-15HLi	KCWS-20HLi	KCWS-25HLi	KCWS-30HLi
Medium temperature range		10°C~95°C				
Medium		Water				
Chilling capacity(kW) 50/60Hz	10°C	33.6	52.8	67.2	86.4	100.8
	15°C	37.3	59.9	74.6	97.2	111.9
Tank capacity (ℓ)		200	250	300	350	
Compressor out put (kW)		6.46	6.46+3.65	6.46×2	6.46×2+3.65	6.46×3
Refrigerant		R410A				
Internal circ. pump 50/60Hz Output (kW)		0.74/0.74	1.5/1.5		2.2/2.2	
		High-efficiency motor				
Medium circ. pump 50/60Hz	Output (kW)	2.3/4.0 High-efficiency motor			4.0/5.5 High-efficiency motor	
	Max. flow rate (ℓ/min)	250/265			367/433	
	Max. output pressure (MPa)	0.48/0.69			0.53/0.57	
Heater capacity (kW)		12(10.9~13.2)		12(10.9~13.2)×2	40(36.3~43.9)	
Pipe connection size	Medium process Medium return	1 1/2B(Socket)		2B(Socket)		
	Cooling water inlet	1 1/2B(Socket)	2B(Socket)		2 1/2B(Socket)	
	Cooling water outlet	1 1/2B(Globe valve)	2B(Globe valve)		2 1/2B(Globe valve)	
	Water supply	1/2B(Socket)				
	Drain	3/4B(Ball valve)	1B(Ball valve)		1B(Socket)	
	Over flow	1B(Socket)			To be with Drain {1B(Socket)}	
	Drain for drain pan	25A(ソケット) 1B(Socket)				
	Inlet of compressed air	φ6Tube fitting				
Utility	Cooling water volume (ℓ/min) *1	111	167	222	278	333
	Supplying pressure of compressed air (MPa)	0.4~0.8				
	Supplying volume of compressed air (Nℓ/min)	6以上				
	Weight (kg)	580	1000	1450	1550	1600
	Electricity (kVA)	31.6	38.7	59.4	83.8	89.7
	Breaker (AT)	100	125	200	300	
	Power source	AC200V 50/60Hz・AC220V 60Hz 3φ 3W				
Paint color		Nittoko N-93 Full gloss paint				
Alarm		Medium short, Pump overload, Chilled water short, Chiller high pressure alarm, Chiller low pressure alarm, Freezing alarm, Chiller over-heat, Temp.high alarm, Temp.low alarm, Sensor error, Reverse phase, Inverter error				
Options		Branch pipe, Hose, Signal light, Nominated-color, Different Voltage				
Dynakleen・N Deo		Standard				
Dimensions (W×D×Hmm)		1020×950×1790	1300×1070×1815	1500×1100×1985	2225×1150×1800	

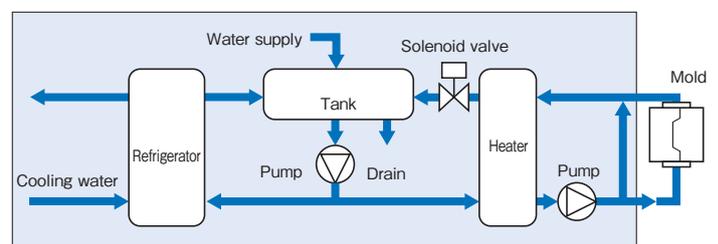
*1 Cooling water volume is figured at 7°C of chilling water, 30°C of inlet cooling water and 35°C outlet cooling water.

1kW=860kcal/h
 1MPa=10.197kg/cm²

❖ Performance curve of medium flow rate (HLi type)



❖ Flow-chart (HLi type)



2 circuits temperature control chilling-heating unit

This unit can serve independent temperature setting for core and cavity to prevent any sink & warpage. Operability and visibility are improved by adopting a touch panel.

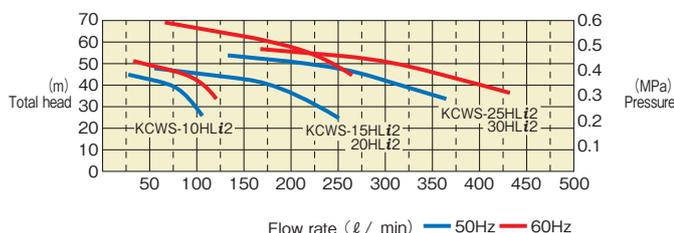
(Indoor type)

Model		KCWS-10HLi2	KCWS-15HLi2	KCWS-20HLi2	KCWS-25HLi2	KCWS-30HLi2
Medium temperature range		10°C~95°C				
Medium		Water				
Chilling capacity(kW) 50/60Hz	10°C	33.6	52.8	67.2	86.4	100.8
	15°C	37.3	59.9	74.6	97.2	111.9
Tank capacity (ℓ)		200	250	300	350	
Compressor out put (kW)		6.46	6.46+3.65	6.46×2	6.46×2+3.65	6.46×3
Refrigerant		R410A				
Internal circ. pump 50/60Hz Output (kW)		1.27/1.28	1.5/1.5		2.2/2.2	
		High-efficiency motor				
Medium circ. pump 50/60Hz	Output (kW)	1.27×2/2.2×2		2.3×2/4×2		4.0×2/5.5×2
		High-efficiency motor				
	Max. flow rate (ℓ/min)	105×2/126×2		250×2/265×2		367×2/433×2
	Max. output pressure (MPa)	0.45×2/0.51×2		0.48×2/0.69×2		0.54×2/0.57×2
Heater capacity (kW)		9(8.2~9.9)×2		12(10.9~13.2)×2		30(27.2~32.9)×2
Pipe connection size	Medium process Medium return	1B×2(Socket)		1½B×2(Socket)		2B(Socket)×2
	Cooling water inlet	1½B(Socket)		2B(Socket)		2½B(Socket)
	Cooling water outlet	1½B(Globe valve)		2B(Globe valve)		2½B(Globe valve)
	Water supply	½B(Socket)				
	Drain	¾B(Ball valve)		1B(Ball valve)		1B(Socket)
	Over flow	1B(Socket)				To be with Drain {1B(Socket)}
	Drain for drain pan	B(Socket)				
	Inlet of compressed air	φ6Tube fitting				
Utility	Cooling water volume (ℓ/min) ※1	111	167	222	278	333
	Supplying pressure of compressed air (MPa)	0.4~0.8				
	Supplying volume of compressed air (Nℓ/min)	6以上				
	Weight (kg)	620	1500	1550	1950	2000
	Electricity (kVA)	39.9	57.1	63	112.6	118.5
	Breaker (AT)	125	175	200	350	
	Power source	AC200V 50/60Hz·AC220V 60Hz 3φ 3W				
Paint color		Nittoko N-93 Full gloss paint				
Alarm		Medium short, Pump overload, Chilled water short, Chiller high pressure alarm, Chiller low pressure alarm, Freezing alarm, Chiller over-heat, Temp.high alarm, Temp.low alarm, Sensor error, Reverse phase, Inverter error				
Options		Branch pipe, Hose, Signal light, Nominated-color, Different Voltage				
Dynakleen·N Deo		Standard				
Dimensions (W×D×Hmm)		1020×950×1790	1500×1100×1985		2700×1150×1800	

※1 Cooling water volume is figured at 7°C of chilling water, 30°C of inlet cooling water and 35°C outlet cooling water.

1kW=860kcal/h
1MPa=10.197kg/cm²

❖ Performance curve of medium flow rate (HLi 2 type)



❖ Flow-chart (HLi 2 type)

