

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces



Page 1 of 7

Design for unit heating or ducted applications with up to 0.4 inches of static pressure.



## Stage Controlled Heaters

CATALOG NUMBER	KW	CFM RANGE	VOLTS/ PHASE (1)	TOTAL AMPS for MOTOR & HEATER	STAGE	MOTOR VOLTAGE	FULL LOAD AMPS for MOTOR ONLY	MOTOR H.P.	WT. LBS	AVAIL. CODE		
P-962U1N03C-DU6L4	3	70-270	208/1	15.4	1	277	1	1/15	98	AS	<input type="checkbox"/>	
P-962U1N03J-DU6L4			240/1	13.5		277	1				<input type="checkbox"/>	
P-962U1N03N-DU6L4			277/1	11.83		277	1				<input type="checkbox"/>	
P-962U1N03D-DU6L4			208/3	9.32		277	1				<input type="checkbox"/>	
P-962U1N03K-DU6L4			240/3	8.21		277	1				<input type="checkbox"/>	
P-962U1N05C-DU6L4			208/1	25.13		277	1.1	1/6	118		<input type="checkbox"/>	
P-962U1N05J-DU6L4	5	200-650	240/1	21.93	1	277	1.1				<input type="checkbox"/>	
P-962U1N05N-DU6L4			277/1	19.15		277	1.1				<input type="checkbox"/>	
P-962U1N05D-DU6L4			208/3	14.97	1	277	1.1				<input type="checkbox"/>	
P-962U1N05K-DU6L4			240/3	13.12		277	1.1				<input type="checkbox"/>	
P-962U1T05U-DU6L4			480/3	7.11		480	1.1				<input type="checkbox"/>	
P-962U1N10D-DU6L4	10	500-1200	208/3	29.45	1	277	1.7	1/4	141	AS	<input type="checkbox"/>	
P-962U1N10K-DU6L4			240/3	25.75		277	1.7				<input type="checkbox"/>	
P-962U1N10U-DU6L4			480/3	13.72		480	1.7				<input type="checkbox"/>	
P-962U2N10D-DU6L4			208/3	29.45	2	277	1.7				<input type="checkbox"/>	
P-962U2N10K-DU6L4			240/3	25.75		277	1.7				<input type="checkbox"/>	
P-962U2T10U-DU6L4			480/3	13.72		480	1.7				<input type="checkbox"/>	
P-962U1N15D-DU6L4	15	500-1200	208/3	43.33	1	277	1.7	1/4	141	AS	<input type="checkbox"/>	
P-962U1N15K-DU6L4			240/3	37.78		277	1.7				<input type="checkbox"/>	
P-962U1T15U-DU6L4			480/3	19.74		480	1.7				<input type="checkbox"/>	
P-962U2N15D-DU6L4			208/3	43.3	2	277	1.7				<input type="checkbox"/>	
P-962U2N15K-DU6L4			240/3	37.78		277	1.7				<input type="checkbox"/>	
P-962U2T15U-DU6L4			480/3	19.74		480	1.7				<input type="checkbox"/>	
P-962U1N10D-DU6L4	10	500-1200	208/3	29.45	1	277	1.7	1/4	141	AS	<input type="checkbox"/>	
P-962U1N10K-DU6L4			240/3	25.75		277	1.7				<input type="checkbox"/>	
P-962U1N10U-DU6L4			480/3	13.72		480	1.7				<input type="checkbox"/>	
P-962U2N10D-DU6L4			208/3	29.45	2	277	1.7				<input type="checkbox"/>	
P-962U2N10K-DU6L4			240/3	25.75		277	1.7				<input type="checkbox"/>	
P-962U2T10U-DU6L4			480/3	13.72		480	1.7				<input type="checkbox"/>	

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces



Page 2 of 7

CATALOG NUMBER	KW	CFM RANGE	VOLTS/ PHASE (1)	TOTAL AMPS for MOTOR & HEATER	STAGE	MOTOR VOLTAGE	FULL LOAD AMPS for MOTOR ONLY	MOTOR H.P.	WT. LBS	AVAIL. CODE	
P-962U1N15D-DU6L4	15	500-1200	208/3	43.33	1	277	1.7	1/4	141	AS	<input type="checkbox"/>
P-962U1N15K-DU6L4			240/3	37.78		277	1.7				<input type="checkbox"/>
P-962U1T15U-DU6L4			480/3	19.74		480	1.7				<input type="checkbox"/>
P-962U2N15D-DU6L4			208/3	43.3	2	277	1.7				<input type="checkbox"/>
P-962U2N15K-DU6L4			240/3	37.78		277	1.7				<input type="checkbox"/>
P-962U2T15U-DU6L4			480/3	19.74		480	1.7				<input type="checkbox"/>
P-962U2N20D-DU6L4	20	750-1600	208/3	58.01	2	277	2.5	1/2	141	AS	<input type="checkbox"/>
P-962U2N20K-DU6L4			240/3	50.61		277	2.5				<input type="checkbox"/>
P-962U2T20U-DU6L4			480/3	26.55		480	2.5				<input type="checkbox"/>
P-962U2N23D-DU6L4	23	1300-2000	208/3	68.14	2	277	4.3	3/4	141	AS	<input type="checkbox"/>
P-962U2N23K-DU6L4			240/3	59.63		277	4.3				<input type="checkbox"/>
P-962U2T25U-DU6L4	25		480/3	34.37		480	4.3				<input type="checkbox"/>
P-962U2N30K-DU6L4	30	1800-2800	240/3	78.47	2	277	6.3	2 MOTORS @ 1/2 H.P. EACH	141	AS	<input type="checkbox"/>
P-962U2T30U-DU6L4			480/3	42.38		480	6.3				<input type="checkbox"/>
P-962U2T35U-DU6L4	35		480/3	48.39		480	6.3				<input type="checkbox"/>
P-962U2T40U-DU6L4	40	2000-3600	480/3	56.71	2	480	8.6	2 MOTORS @ 3/4 H.P. EACH	141	AS	<input type="checkbox"/>
P-962U2T45U-DU6L4	45		480/3	62.72		480	8.6				<input type="checkbox"/>
P-962U2T50U-DU6L4	50		480/3	68.74		480	8.6				<input type="checkbox"/>

(1) 60 Hz only

(2) AS = Assemble Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times

(3) Default/standard hand-of-connection is right hand (U6L4) optional left hand (U4L6) is available, see optional features.

(4) Built-in door interlocking disconnect switch is included.

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces



Page 3 of 7

## SSR Controlled Heaters

CATALOG NUMBER	KW	CFM RANGE	VOLTS / PHASE (1)	TOTAL AMPS for MOTOR & HEATER	STAGE	MOTOR VOLTAGE	FULL LOAD AMPS for MOTOR ONLY	MOTOR H.P.	WT. (LBS)	AVAIL. CODE	
P-962U1N03C-DEU6L4	3	70-270	208/1	15.4	SSR	277	1	1/15	98	C	<input type="checkbox"/>
P-962U1N03J-DEU6L4			240/1	13.5		277	1				<input type="checkbox"/>
P-962U1N03N-DEU6L4			277/1	11.83		277	1				<input type="checkbox"/>
P-962U1N03D-DEU6L4			208/3	9.32		277	1				<input type="checkbox"/>
P-962U1N03K-DEU6L4			240/3	8.21		277	1				<input type="checkbox"/>
P-962U1N05C-DEU6L4	5	200-650	208/1	25.13	SSR	277	1.1	1/6	118	C	<input type="checkbox"/>
P-962U1N05J-DEU6L4			240/1	21.93		277	1.1				<input type="checkbox"/>
P-962U1N05N-DEU6L4			277/1	19.15		277	1.1				<input type="checkbox"/>
P-962U1N05D-DEU6L4			208/3	14.97	SSR	277	1.1				<input type="checkbox"/>
P-962U1N05K-DEU6L4			240/3	13.12		277	1.1				<input type="checkbox"/>
P-962U1T05U-DEU6L4			480/3	7.11		480	1.1				<input type="checkbox"/>
P-962U1N10D-DEU6L4	10	500-1200	208/3	29.45	SSR	277	1.7	1/4	141	C	<input type="checkbox"/>
P-962U1N10K-DEU6L4			240/3	25.75		277	1.7				<input type="checkbox"/>
P-962U1N10U-DEU6L4			480/3	13.72		480	1.7				<input type="checkbox"/>
P-962U1N15D-DEU6L4	15	500-1200	208/3	43.33	SSR	277	1.7				<input type="checkbox"/>
P-962U1N15K-DEU6L4			240/3	37.78		277	1.7				<input type="checkbox"/>
P-962U1T15U-DEU6L4			480/3	19.74		480	1.7				<input type="checkbox"/>
P-962U2T20U-DEU6L4	20	750-1600	480/3	26.55	SSR	480	2.5	1/2	163		<input type="checkbox"/>
P-962U2T25U-DEU6L4	25	1300-2000	480/3	34.37	SSR	480	4.3	3/4	201		<input type="checkbox"/>
P-962U2T30U-DEU6L4	30	1800-2800	480/3	42.38	SSR	480	6.3	2 MOTORS @ 1/2 H.P. EACH	278		<input type="checkbox"/>
P-962U2T35U-DEU6L4	35		480/3	48.39		480	6.3				<input type="checkbox"/>

(1) 60 Hz only

(2) AS = Assemble Stock, AS listed heaters ordered with custom (C) features are subject to longer lead times

(3) Default/standard hand-of-connection is right hand (U6L4) optional left hand (U4L6) is available, see optional features.

(4) Built-in door interlocking disconnect switch is included.

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces

**INDEECO**®

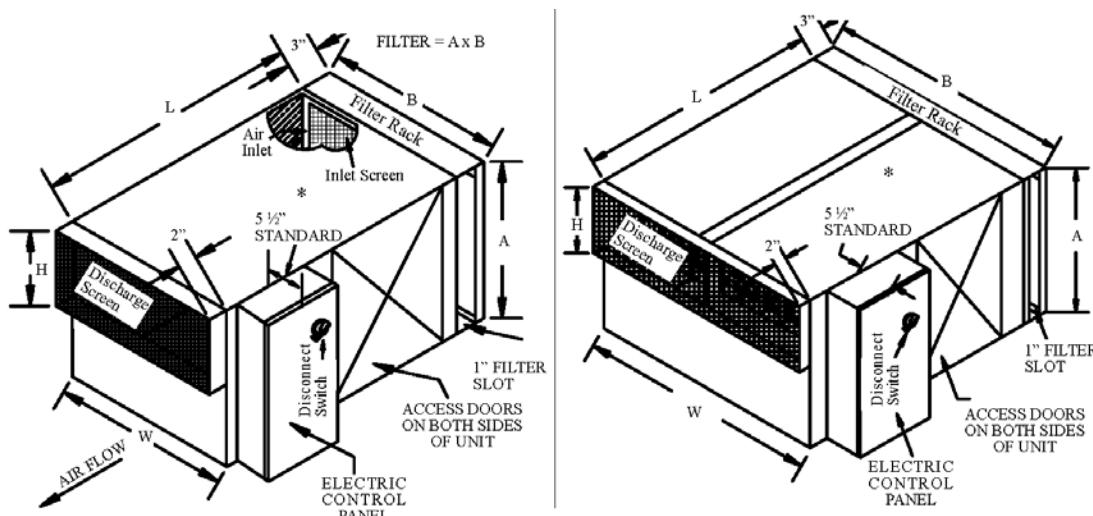
Page 4 of 7

## Factory Built-in Options

CODE	DESCRIPTION	AVAILABILITY CODE (2)	
T	Single-stage built-in adjustable thermostat	AS	<input type="checkbox"/>
	Two-stage built-in adjustable thermostat		<input type="checkbox"/>
U4L6	Optional left hand connection in place of standard right hand. (Remove U6L4 from catalog number and replace with U4L6)	C	<input type="checkbox"/>

## Accessory Remote Room Thermostat

CATALOG NUMBER	DESCRIPTION	AVAILABILITY CODE (2)	
1006998	Single-Stage Low Voltage Remote Thermostat - White - Bimetal	AS	<input type="checkbox"/>
1007030	Two-Stage Low Voltage Remote Thermostat - White - Bimetal		<input type="checkbox"/>
1016941	Low Voltage Electronic Remote Wall Thermostat - White - SSR - 0-10VDC Output		<input type="checkbox"/>
1016942	Low Voltage Electronic Duct Discharge Sensor and Room Set Point adjuster - SSR - 0-10VDC Output		<input type="checkbox"/>
1016941			<input type="checkbox"/>



P-962	Dimensions					Weight	
	A In.	B In.	L In.	Discharge			
				W	H		
3 KW	12	14	32	14	8	98	
5 KW	14	18	36	18	8	118	
10 & 15 KW	18	18	36	18	10	141	
20 KW	18	22	36	22	10	163	
23 & 25 KW	18	26	36	26	10	201	

P-962	A In.	B In.	L In.	Discharge		Weight
				W	H	
25-30-35 KW	18	44	36	44	10	278
40-45-50 KW	18	52	36	52	10	319

Note: Heater control panel access standard on right hand as shown (U6L4). For panel with opposite side access specify and order left hand (U4L6). \* Control box depends on actual components. Consult factory for exact dimensions.

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces



Page 5 of 7

## ARCHITECT'S AND ENGINEER SPECIFICATIONS

The electric plenum rated unit shall be by Indeeco and assembled in U.S.A.

Units shall be certified by ETL and comply with UL1995 and NEC requirements for horizontal discharge mounting. All capacities, voltages and options shall be as specified in the heater schedule. All three-phase heaters shall have a balanced heating load. Control voltage with built-in transformer shall be 24 VAC.

**CABINET** - The cabinet shall be of 20 gauge galvanized steel with 1" of acoustic fiberglass insulation. Inlet and outlet shall be fitted with protective screens and suitable for duct connection. Access panels to fan(s) shall be on both sides of the cabinet. Heater control enclosure shall be dust tight.

**HEATING ELEMENTS** - The heating elements shall be 80% nickel and 20% chromium resistance wire. The heating elements shall be located directly in front of the blower discharge for uniform heating.

**OPERATION** – The heater and fan(s) operation shall be controlled by either built-in or remote thermostat. Fan motor speed shall be field adjusted to provide desired temperature rise.

**SAFETY THERMAL CUTOFFS** - An automatic resetting thermal cutoff for primary and fuse link cutoff(s) for secondary over-temperature protection shall be built into the unit to provide zero clearance to combustible materials.

**MOTOR AND BLOWER ASSEMBLY** - The PSC motor(s) and blower(s) shall be direct drive and resiliently mounted on a rigid heavy gauge frame for quiet operation and long life. The motor(s) shall be rated for continuous operation and be provided with automatic reset overload. The blower(s) shall be forward curved, double inlet, centrifugal type with discharge directly on the full length of the elements to provide uniform discharge air temperatures.

**AIR FILTERS**- Inlet filter(s) shall be provided to assure clean air circulation. The throw away filter(s) shall be easily removed for changing from outside of the unit.

**DISCONNECT SWITCH** -The unit shall have a door interlocking disconnect rated at a minimum of 125% of the total electrical load and shall have single point electrical connection for the unit.

**BUILT-IN CONTROLS** - Clearly labeled power and control terminal blocks shall be provided for all field electrical connections. Pressure differential airflow switch(s) shall be provided to interlock airflow with the operation of the unit. Power fusing shall be provided for units over 48 amps as required by NEC. Magnetic disconnecting contactor(s) for stage and safety control circuit interlock, fan relay and adjustable motor speed controller shall be provided. Control terminal block shall allow for remote disabling of the fan, remote switch is to be provided by the installer.

**TEMPERATURE CONTROL** - The unit is designed to be controlled by a remote thermostat. Thermostat field connections shall be made at a clear marked control terminal block located inside the heater enclosure.

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces



Page 6 of 7

**FAN SPEED** – Variable fan motor speed control shall be field adjustable to increase temperature rise, factory set at maximum. Controller shall be located inside the control enclosure for ease of adjustment.

The following Factory Installed and prewired Optional Controls shall be as specified in the heater schedule.

- Built-in thermostat for 1 or 2 staged controlled units
- SSR controlled heater (requires remote thermostat control of 0-10VDC, 4-20mA or 0-135 ohm)
- Left hand (U4L6) heater terminal box connection

The following Field Installed Optional Equipment shall be supplied as specified in heater schedule

- Low voltage remote wall mounted 1 or 2-stage thermostat for staged controlled heaters
- Remote wall mounted proportional 0-10VDC thermostat for SSR controlled heater

## Pressure Drop Tables

Model UHHP Catalog Series P-962

3kW Unit Voltage 277 Single Phase

CFM	Discharge Static Pressure in Inches				
	0.1	0.2	0.3	0.4	0.5
Max.	270	245	225	180	155
Min.	95	85	80	70	45

3kW Unit Voltage 208 Single and Three Phase

CFM	Discharge Static Pressure in Inches				
	0.1	0.2	0.3	0.4	0.5
Max.	220	205	165	115	55
Min.	100	85	75	65	35

3kW Unit Voltage 240 Single and Three Phase

CFM	Discharge Static Pressure in Inches				
	0.1	0.2	0.3	0.4	0.5
Max.	250	230	195	145	70
Min.	100	85	75	65	35

5kW Unit Voltage 277 Single and 480 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	740	700	640	590	530	490	450
Min.	290	295	250	230	210	200	190

5kW Unit Voltage 208 Single and Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	540	515	490	470	440	420	480
Min.	295	265	245	225	200	180	160

5kW Unit Voltage 240 Single and Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	670	630	590	555	515	475	440
Min.	290	275	250	230	210	200	190

10 & 15kW Unit Voltage 480 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	1390	1370	1350	1270	1230	1130	1040
Min.	450	440	430	380	410	405	400

10 & 15kW Unit Voltage 208 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	960	940	930	920	915	895	885
Min.	500	480	470	450	430	410	390

# UHHP P-962 Series

Plenum Rated Units for Enclosed Spaces



Page 7 of 7

## 10 & 15kW Unit Voltage 240 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	1160	1140	1120	1090	1050	1020	960
Min.	450	440	430	420	410	405	400

## 20kW Unit Voltage 480 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	1820	1790	1740	1660	1570	1450	1340
Min.	820	790	760	670	590	520	440

## 20kW Unit Voltage 208 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	1760	1740	1700	1640	1550	1460	1350
Min.	820	790	760	680	590	520	440

## 20kW Unit Voltage 240 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	1860	1820	1770	1660	1540	1380	1220
Min.	820	790	760	680	590	510	440

## 23kW Unit Voltage 208 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	2080	2040	2010	1980	1890	1770	1630
Min.	1200	1120	1040	950	870	750	650

## 23kW Unit Voltage 240 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	2300	2160	2120	2060	1990	1860	1770
Min.	1200	1120	1040	950	870	750	650

## 23 & 25kW Unit Voltage 480 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	2320	2170	2100	2050	1970	1870	1770
Min.	1200	1120	1040	950	870	750	640

## 30kW Unit Voltage 240 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	2730	2670	2570	2495	2390	2295	2190
Min.	1550	1510	1470	1410	1370	1280	1140

## 30 & 35kW Unit Voltage 480 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	3170	3030	2910	2790	2600	2440	2240
Min.	1550	1510	1480	1410	1380	1190	1120

## 40, 45, 50kW Unit Voltage 480 Three Phase

CFM	Discharge Static Pressure in Inches						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Max.	4150	4050	4960	3820	3650	3340	3000
Min.	2200	2190	2180	2130	2090	2000	1900