

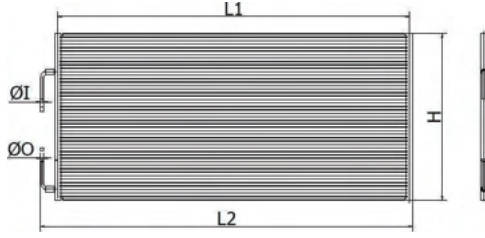
KALTER SERISI





Discover
the potential



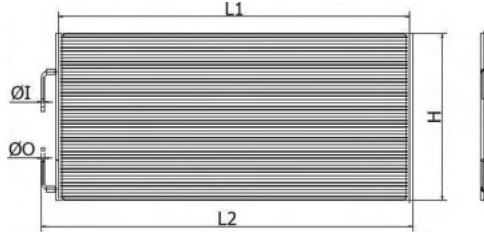


MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 100		KALTER 100
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		1060		160
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		2"		2"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		2"		2"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			200		200
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		487,4		93,78
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		41952		8024
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			2		2
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		4200-42000		4200-42000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		0,6-3,6		0,6-3,6
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94

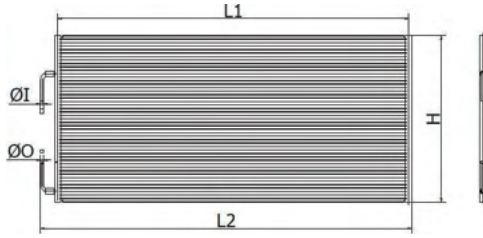


MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 200		KALTER 200
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		2120		2120
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		3"		3"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		3"		3"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			400		400
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		974.8		186.36
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		83904.00		16048.00
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			4		4
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		8400 - 84000		8400 - 84000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		1,2 - 7,2		1,2 - 7,2
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

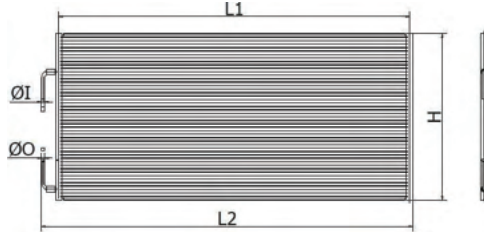
ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94



MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION					
	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 300		KALTER 300
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		3180		3180
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		3"		3"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		3"		3"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			600		600
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		1462.2		279.54
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		125856.00 X6		24072.00 X6
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			6		6
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		12600 - 126000		12600 - 126000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		1,8 - 10,8		1,8 - 10,8
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94

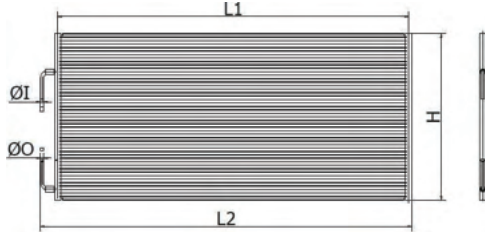


MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 400		KALTER 400
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		4240		4240
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		4"		4"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		4"		4"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			800		800
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		1949,6		372,72
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		167808.00		32096.00
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			8		8
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		16800 - 168000		16800 - 168000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		2,4 - 14,4		2,4 - 14,4
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

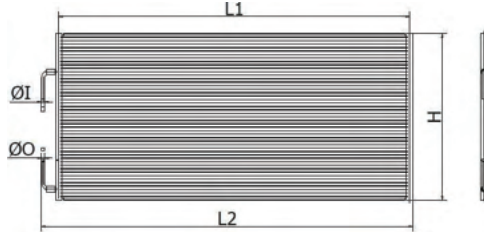
ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94



MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION					
	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 500		KALTER 500
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		5300		5300
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		4"		4"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		4"		4"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			1000		1000
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		2437.0		465.90
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		209760		40120
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			10		10
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		33600 - 336000		33600 - 336000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		3 - 18		3 - 18
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94

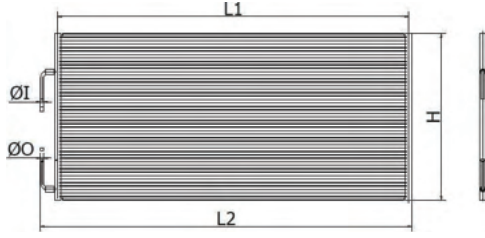


MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 600		KALTER 600
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		6360		6360
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		6"		6"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		6"		6"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			1200		1200
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		2924,4		559,08
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		251712.00		48144.00
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			12		12
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		25200 - 252000		25200 - 252000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		3,6 - 21,6		3,6 - 21,6
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

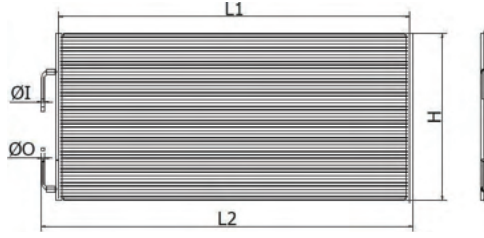
ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94



MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION					
	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 700		KALTER 700
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		7420		7420
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		6"		6"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		6"		6"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			1400		1400
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		3411,8		652,26
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		293664		56168
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			14		14
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		29400-294000		29400-294000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		4,2 - 25,2		4,2 - 25,2
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94

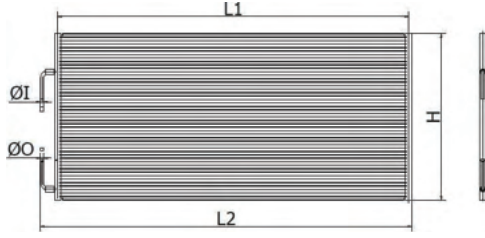


MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 800		KALTER 800
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		8480		8480
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		8"		8"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		8"		8"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			1600		1600
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		3899,2		745,44
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		335616		64192
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			16		16
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		33600-336000		33600-336000
FAN ÇEKİTİĞİ GÜÇ MİN - MAX	Kw/h		4,8 - 28,8		4,8 - 28,8
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94

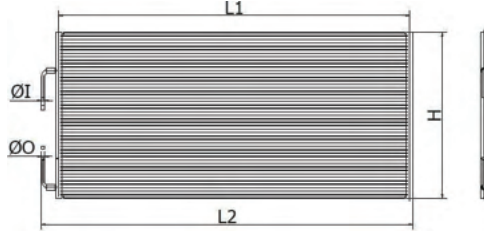


MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 900		KALTER 900
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		9540		9540
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		8"		8"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		8"		8"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			1800		1800
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		4386,6		838,62
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		377568		72216
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			18		18
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		37800-378000		37800-378000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		5,4-32,4		5,4-32,4
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94



MİKRO KANALLI EŞANJÖR MICRO CHANNEL HEAT EXCHANGER; KONDANSER HESAPLAMASI CONDENSER CALCULATION

	BİRİM UNIT	TASARIM KOŞULLARI DESIGN CONDITIONS1	SEÇENEK 1 OPTION1	TASARIM KOŞULLARI 2 DESIGN CONDITIONS 2	SEÇENEK 2 OPTION 2
MODEL MODEL			KALTER 1000		KALTER 1000
TOPLAM UZUNLUK TOTAL LENGTH(L1)	mm		10600		10600
TOPLAM YÜKSEKLİK TOTAL HEIGHT(H)	mm		2173		2173
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
MANİFOLD ÇAPI MANIFOLD DIAMETER(Φ H)	mm		43.5		43.5
GİRİŞ BAĞLANTISI INLET CONNECTION(Φ I)	mm		8"		8"
ÇIKIŞ BĞLANTISI OUTLET CONNECTION(Φ O)	mm		8"		8"
KANAT GENİŞLİĞİ FIN WIDTH(CD)	mm		32.0		32.0
İNÇ BAŞINA KANAT FINS PER INCH			21		21
KANAT YÜKSEKLİĞİ FIN HEIGHT	mm		8.10		8.10
DİZİNLER BANKS			1		1
TÜP SAYISI NO. OF TUBES			2000		2000
GEÇİŞ SAYISI NO. OF PASSES			1		1
GEÇİŞ DAĞITIMI PASS DISTRIBUTION			100		100
SU TARAFI WATER SIDE					
SOĞUTUCU AKIŞKAN TİPİ TYPE OF REFRIGERANT		Water	Water	Water	Water
KAPASİTE CAPACITY	kW		4847		931,8
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	50.00	50.0	50.00	50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C	40.00	40.0	40.00	40.0
AKIŞ HIZI FLOW RATE	kg/h		419520		80240
BASINÇ DÜŞÜŞÜ PRESSURE DROP (TUBE)	kPa		162.4		8.2
HAVA TARAFI AIR SIDE					
GİRİŞ SICAKLIĞI INLET TEMPERATURE	°C	10.00	10.0	35.00	35.0
BAĞIL NEM RELATIVE HUMIDITY	%		50.0		50.0
ÇIKIŞ SICAKLIĞI OUTLET TEMPERATURE	°C		41.9		41.7
FAN TİPİ FAN TYPE			EC		EC
FAN ADETİ FAN QUANTITY			20		20
FAN ÇAPI FAN DIAMETER	mm		800		800
FAN DEBİSİ MİN-MAX FLOW RATE	m³/h		42000-420000		42000-420000
FAN ÇEKTİĞİ GÜÇ MİN - MAX	Kw/h		6-36		6-36
HIZ VELOCITY	m/s		3.36		3.36
BASINÇ DÜŞÜŞÜ PRESSURE DROP	pa		127.7		127.7

ANTIFREEZE MIX RATIO % WATER+ GLYCOL	100	90 + 10	80 + 20	70 + 30	60 + 40	50 + 50	40 + 60	30 + 70	20 + 80	10 + 90
°C	0 °C	- 3 °C	- 8 °C	- 16 °C	- 25 °C	- 37 °C	- 50 °C	<- 50 °C	<- 45 °C	<- 28 °C

ETHYLENE GLYCOL WEIGHT %	0	10	20	30	40	50
.(12) CF3	1	0.99	0.98	0.97	0.96	0.94