

MCHM / MCHD Series
MULTIPIPE INVERTER SYSTEM 60 HZ
Cooling Nominal: 18,000 - 60,000 Btuh (5.3 - 17.5 kW)
16 SEER - R410A Refrigerant

MULTI PIPE VRF SYSTEM (MPV) INDOOR UNITS								
APPLICABLE TO ALL MODELS	MODEL NO.	ME - -	009P	012P	018P	021P	024P	
	Cooling Capacity Btuh (kw)	Nominal	9,000 (2.6)	12,000 (3.5)	18,000 (5.3)	21,000 (6.1)	24,000 (7.0)	
		Minimum	5,118 (1.5)	6,824 (2.0)	7,000 (2.1)	7,165 (2.1)	7,200 (2.1)	
	Heating Capacity Btuh (kw)	Maximum	11,940 (3.5)	15,000 (4.4)	21,000 (6.2)	27,300 (8.0)	30,000 (8.8)	
		Nominal	9,000 (2.6)	12,000 (3.5)	18,000 (5.3)	21,000 (6.1)	24,000 (7.0)	
	Efficiency	Minimum	5,460 (1.6)	6,150 (1.8)	7,100 (2.1)	7,165 (2.1)	7,200 (2.5)	
		Maximum	15,360 (5.5)	16,400 (4.8)	33,000 (9.7)	33,500 (9.8)	34,000 (9.9)	
	Refrigerant Control	SEER	Btuh/w (w/w)	16 (4.7)				
	Refrigerant Control	Electronic Expansion Valve @ Outdoor Unit						
	Electrical	Voltage-Phase-Frequency		208-230/1/60Hz				
		Range		min 187 - max 253				
	Coil Type:	Grooved Copper Tubes - Aluminum Blue Slit Fin						
	Controls	LCD Wireless & Wired Remote Control (8 m cable Std.)						
Air Filter	Cleanable Cartridge Type							
Refrigerant Connections inches (mm)	Liquid		1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	
	Suction		3/8 (9.52)	3/8 (9.52)	1/2 (12.7)	5/8 (15.9)	5/8 (15.9)	
Refrigerant Connection Type	Flare							
DUCTED	MODEL NO.	MESP	009P 2A-RTG026	012P 2A-RTG035	018P 2A-RTG053	021P 2A-RTG062	024P 2A-RTG070	
	Fan	Type	Centrifugal					
		Speed	4	4	4	4	4	
		Air Flow CFM (m³/hr) - Hi	265 (450)	294 (500)	412 (700)	586 (1000)	586 (1000)	
		Noise Level (dbA) Hi	37	39	41	42	42	
		Motor (Watts)	80	80	100	124	124	
	Electrical	FLA	0.28	0.31	0.41	0.50	0.50	
	Drain Connections inches (mm)	1 (25.4)						
	Dimensions inches (mm)	Height	7 7/8 (200)	7 7/8 (200)	7 7/8 (200)	7 7/8 (200)	7 7/8 (200)	
		Width	27 1/2 (700)	27 1/2 (700)	35 1/2 (900)	43 1/3 (1100)	43 1/3 (1100)	
		Depth	24 1/4 (615)	24 1/4 (615)	24 1/4 (615)	24 1/4 (615)	24 1/4 (615)	
	Net Weight Lbs (kgs)	48.5 (22)		50.7 (23)	59.5 (27)	68.3 (31)	68.3 (31)	
	HIGH WALL	MODEL NO.	MEWM	009P 2A-RWG026	012P 2A-RWG035	018P 2A-RWG053	N/A	024P 2A-RWG070
Fan		Type	Cross Flow Fan					
		Speed	4	4	4		4	
		Air Flow CFM (m³/hr) - Hi	330 (560)	341 (580)	500 (850)		588 (1000)	
		Noise Level (dbA) Hi	47	48	54	N/A	55	
		Motor (Watts)	44	44	55		53	
Electrical		FLA	0.20	0.20	0.25		0.24	
Drain Connections inches (mm)		3/4 (20.0)						
Dimensions inches (mm)		Height	10 7/8 (275)	10 7/8 (275)	11 3/4 (298)		12 1/2 (315)	
		Width	33 3/8 (848)	33 3/8 (848)	37 (940)	N/A	39 3/5 (1007)	
		Depth	7 (180)	7 (180)	7 7/8 (200)		8 5/8 (219)	
Net Weight Lbs (kgs)		22.0 (10)		22.0 (10)	28.7 (13)		35.3 (16)	
FLOOR / CEILING		MODEL NO.	MEFC	009P 2A-RTG026	012P 2A-RTG035	018P 2A-RTG053	N/A	024P 2A-RTG070
	Fan	Type	Centrifugal					
		Speed	4	4	4		4	
		Air Flow CFM (m³/hr) - Hi	383 (645)	383 (645)	559 (950)		736 (1250)	
		Noise Level (dbA) Hi	46	46	50	N/A	54	
		Motor (Watts)	55	55	110		145	
	Electrical	FLA	0.25	0.25	0.50		0.66	
	Drain Connections inches (mm)	3/4 (20.0)						
	Dimensions inches (mm)	Height	8 7/8 (225)	8 7/8 (225)	8 7/8 (225)		8 7/8 (225)	
		Width	48 (1220)	48 (1220)	48 (1220)	N/A	48 (1220)	
		Depth	27 1/2 (700)	27 1/2 (700)	27 1/2 (700)		27 1/2 (700)	
	Net Weight Lbs (kgs)	88.2 (40)		88.2 (40)	88.2 (40)		99.2 (45)	
	CASSETTE	MODEL NO.	MEC	N/A	M012P 2A-RTG035	M018P 2A-RTG053	N/A	S024P 2A-RTG070
Fan		Type	Turbo Fan					
		Speed		4	4		4	
		Air Flow CFM (m³/hr) - Hi	N/A	353 (600)	353 (600)	N/A	694 (1180)	
		Noise Level (dbA) Hi		46	46		39	
		Motor (Watts)		50	50		100	
Electrical		FLA		0.18	0.18		0.43	
Drain Connections inches (mm)		1 1/4 (31)						
Dimensions inches (mm)		Panel Height		2 (50)	2 (50)		2 3/8 (60)	
		Width		25 1/2 (650)	25 1/2 (650)		37 1/2 (950)	
		Depth		25 1/2 (650)	25 1/2 (650)		37 1/2 (950)	
Net Weight Lbs (kgs)			6.6 (3)	6.6 (3)		15.4 (7)		
Body Dimensions inches (mm)		Height		9 (230)	9 (230)		9 3/8 (240)	
	Width		22 3/8 (570)	22 3/8 (570)		33 1/8 (840)		
	Depth		22 3/8 (570)	22 3/8 (570)		33 1/8 (840)		
Net Weight Lbs (kgs)		39.6 (18)	39.6 (18)		61.6 (28)			

MCHM / MCHD Series
MULTIPIPE INVERTER SYSTEM 60 HZ
 Cooling Nominal: 18,000 - 60,000 Btuh (5.3 - 17.5 kW)
 16 SEER - R410A Refrigerant

MULTI PIPE VRF SYSTEM (MPV) OUTDOOR UNIT							
APPLICABLE TO ALL MODELS	MODEL NO.	MCH -		ALL MODELS			
	Efficiency	SEER	Btuh/w (w/w)	16 (4.7)			
	Refrigerant Control	Electronic Expansion Valve @ Outdoor Unit					
	Electrical	Voltage-Phase-Frequency		208-230/1/60Hz			
		Range		min 177 - max 253			
Coil Type:	Grooved Copper Tubes - Aluminum Blue Slit Fin						
Refrigerant Connection Type	Flare						
MULTI CONNECTION OUTDOOR UNIT	MODEL NO.	MCHM	020P2 A2-RMG060	030P2 A3-RMG080	035P2 A4-RMG090	040P0 A4-RMG115	045P2 A5-RMG145
	Maximum No of Indoor Units		2	3	4	4	5
	Maximum Indoor Capacity Connectable Btuh(W)		21,000 (6.2)	36,000 (10.5)	48,000 (14.0)	48,000 (14.0)	60,000 (17.5)
	Cooling Capacity Btuh (kw)	Nominal	18,000 (5.3)	27,000 (8.0)	30,000 (8.8)	36,000 (10.0)	41,000 (12.0)
		Minimum	7,000 (2.1)	7,500 (2.2)	7,500 (2.2)	8,500 (2.5)	8,500 (2.5)
		Maximum	21,000 (6.2)	33,000 (9.8)	34,000 (10.0)	34,120 (10.0)	46,400 (13.6)
	Heating Capacity Btuh (kw)	Nominal	19,000 (5.6)	29,000 (8.5)	30,000 (8.8)	36,000 (10.5)	60,000 (17.5)
		Minimum	8,530 (2.5)	7,500 (2.2)	7,500 (2.2)	10,700 (3.1)	10,700 (3.1)
		Maximum	22,600 (6.6)	35,000 (10.3)	36,000 (10.5)	41,000 (12.0)	47,800 (14.9)
	Fan	Type	Axial Flow				
		Speed	3	3	3	3	3
		Air Flow CFM (m³/hr) - Hi	1530 (2600)	1530 (2600)	1530 (2600)	2177 (3700)	3237 (5500)
		Noise Level (dbA) - Hi	56	56	56	59	58
		Motor (Watts)	114	120	120	150	220
	Compressor	Type	Inverter Rotary			Inverter Scroll	
		Compressor Pwr. Input Nom. (W)	1245	2200	2200	2210	3010
		Rated Amps (RLA)	8.4	9.7	9.7	21	13.5
	Electrical	Fan Motor (FLA)	0.54	0.59	0.59	0.68	1.1
		Cooling Power Input Nominal (W)	1650	3050	3450	4300	4400
		Frequency (Hz)	60	60	60	N/A - 3D	60
		Minimum Circuit Amps (MCA)	13.0	20.0	20.0	28.0	29.0
		Max. Fuse Amps (MFA-MOCP)	20	30	30	45	50
	Refrigerant Connections inches (mm)	Liquid-Suction 1	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)	3/8(9.52)-5/8(15.9)	3/8(9.52)-5/8(15.9)
		Liquid-Suction 2	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)	1/4(6.35)-1/2(12.7)	1/4(6.35)-1/2(12.7)
		Liquid-Suction 3	N/A	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)	1/4(6.35)-1/2(12.7)
		Liquid-Suction 4		N/A	N/A	1/4(6.35)-3/8(9.52)	1/4(6.35)-3/8(9.52)
		Liquid-Suction 5		N/A	N/A	N/A	1/4(6.35)-3/8(9.52)
Refrigerant Charge R410a	Oz. (Kgs)	47.6 (1.4)	77.6 (2.2)	77.6 (2.2)	102.3 (2.9)	169.3 (4.8)	
Dimensions inches (mm)	Height	23 1/2 (596)	27 1/2 (700)	27 1/2 (700)	31 (789)	43 1/2 (1103)	
	Width	35 1/2 (899)	37 1/4 (946)	37 1/4 (946)	36 1/4 (920)	28 (1015)	
	Depth	14 7/8 (378)	15 1/2 (396)	15 1/2 (396)	16 3/4 (427)	17 1/4 (440)	
Net Weight Lbs (kgs)		94.6 (43)	134.2 (61)	136.7 (62)	152.5 (69)	225 (102)	
SINGLE CONNECTION OUTDOOR UNIT	MODEL NO.	MCHD	050P0 A8-RLG150	060P0 A9-RLG175			
	Maximum No of Indoor Units		8	9			
	Maximum Indoor Capacity Connectable Btuh(W)		72,000 (21.1)	81,000 (23.7)			
	Cooling Capacity Btuh (kw)	Nominal	48,000 (14.1)		60,000 (17.5)		
		Minimum	3,410 (1.0)		3,410 (1.0)		
		Maximum	54,600 (16.0)		61,400 (18.0)		
	Heating Capacity Btuh (kw)	Nominal	48,000 (14.1)		60,000 (17.5)		
		Minimum	4,100 (1.2)		4,100 (1.2)		
		Maximum	58,000 (17.0)		63,100 (18.5)		
	Fan	Type	Axial Flow				
		Speed	3	3	3		
		Air Flow CFM (m³/hr) - Hi	3766 (6400)		4120 (7000)		
		Noise Level (dbA) - Hi	57		57		
		Motor (Watts)	150		150		
	Compressor	Type	Inverter Rotary				
		Compressor Pwr. Input Nom. (W)	4580		4580		
		Rated Amps (RLA)	21		21		
Electrical	Fan Motor (FLA)	0.68		0.68			
	Cooling Power Input Nominal (W)	5000		5600			
	Frequency (Hz)		N/A - 3D				
	Minimum Circuit Amps (MCA)	27.0		27.0			
	Max. Fuse Amps (MFA-MOCP)	45		45			
Refrigerant Connections inches (mm)	Liquid	3/8 (9.52)		3/8 (9.52)			
	Suction	5/8 (15.9)		5/8 (15.9)			
Refrigerant Charge R410a	Oz. (Kgs)	174.6 (4.9)		174.6 (4.9)			
Dimensions inches (mm)	Height	53 1/7 (1350)		53 1/7 (1350)			
	Width	35 3/7 (900)		35 3/7 (900)			
	Depth	14 3/4 (375)		14 3/4 (375)			
Net Weight Lbs (kgs)		255.8 (116)		255.8 (116)			

USE WITH MADM DISTRIBUTION MODULE

DISTRIBUTION MODULE	MODEL NO.	MADM	002P0 AF-R01	003P0 AF-R01	005P0 AF-R01	NOTES
	Maximum No of Indoor Units		2	3	5	MCHM Multi Connection: 1. Outdoor units with 2 to 5 pipe connections. 2. Max. 25m. distance from outdoor to farthest indoor unit. 3. Max. 80m. Total pipe length for all indoor units.
	Noise Level (dbA) - Hi		28	28	26	
	Refrigerant Connections to Outdoor Units inches (mm)	Liquid	3/8 (10)	3/8 (10)	3/8 (10)	
	Drain Connections inches (mm)	Suction	5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	MCHD Single Connection: 1. MADM Distribution Module (2,3 or 5 connection model) is required for indoors to connect. 2. Max. 55m piping from outdoor to MADM & Max.90m total for all indoor units piping. 3. 70m max. to farthest indoor.
	Refrigerant Connections to Indoor Units inches (mm)	Liquid	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	
	Electrical	Suction	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	
	Body Dimensions inches (mm)	Voltage-Phase Amps		208/230-1		
			Height	0.02	0.03	0.05
			Width	7 1/4 (182)	7 1/4 (182)	7 1/2 (193)
Net Weight Lbs (kgs)	Depth	17 1/4 (439)	17 1/4 (439)	18 1/4 (463)		
		12 1/3 (313)	12 1/3 (313)	13 1/3 (338)		

MCHM / MCHD Series
MULTIPIPE INVERTER SYSTEM 60 HZ
 Cooling Nominal: 18,000 - 60,000 Btuh (5.3 - 17.5 kW)
 16 SEER - R410A Refrigerant

MULTI PIPE OUTDOOR UNIT MODELS
 with INDOOR Unit Capacity Combinations (000 Btuh)

MULTI CONNECTION OUTDOOR	MCHM020P2A2		MCHM030P2A3				MCHM035P2A4						
	4- COMBINATIONS		11- COMBINATIONS				2 UNITS		16- COMBINATIONS				
	1 UNIT	2 UNITS	2 UNITS		3 UNITS		2 UNITS		3 UNITS		4 UNITS		
	9	(2x9)	(2x9)	(2x18)	(3x9)	9+(2x12)	(2x9)	9+12	(3x9)	(2x9)+12	(3x12)	(3x9)	
	12	9+12	9+18	9+12	(2x9)+12	(2x9)+18	9+18	(2x12)	9+(2x12)	9+12+18	-	(3x9)+12	
			12+18	(2x12)	(3x12)		12+18	(2x18)	(2x12)+18	(2x9)+18		(2x9)+(2x12)	
	MCHM040P9A4				MCHM045P2A5								
	47- COMBINATIONS				86- COMBINATIONS								
	2 UNITS		3 UNITS		4 UNITS	2 UNITS		3 UNITS		4 UNITS		5 UNITS	
	9+12	(3x9)	9+18+21	(4x9)	9+12	(3x9)	9+18+21	12+18+21	(4x9)	9+(2x12)+18	(5x9)	(3x9)+(2x18)	
9+18	(3x9)+12	9+18+24	(3x9)+12	9+18	(2x9)+12	9+18+24	12+18+24	(3x9)+12	9+(2x12)+21	(4x9)+12	(2x9)+(3x12)		
9+21	(2x9)+18	9+(2x21)	(3x9)+18	9+21	(2x9)+18	9+(3x21)	12+(2x21)	(3x9)+18	9+(2x12)+24	(4x9)+18	(2x9)+(2x12)+18		
9+24	(2x9)+21	(3x12)	(3x9)+21	9+24	(2x9)+21	9+21+24	12+21+24	(3x9)+21	9+12(2x18)	(4x9)+21	(2x9)+(3x12)+21		
(2x12)	(2x9)+24	(2x12)+18	(3x9)+24	(2x12)	(2x9)+24	9+(2x24)	12+(2x24)	(3x9)+24	9+12+18+21	(4x9)+24	9+(4x12)		
12+18	9+(2x12)	(2x12)+21	(2x9)+(2x12)	12+18	9+(2x12)	(3x12)	(3x18)	(2x9)+(2x12)	9+12+(2x21)	(3x9)+(2x12)	9+(3x12)+18		
12+21	9+12+18	(2x12)+24	(2x9)+12+18	12+21	9+12+18	(2x12)+18	(2x18)+21	(2x9)+12+18	9+(3x18)	(3x9)+12+18	(5x12)		
12+24	9+12+21	12+(2x18)	(2x9)+12+21	12+24	9+12+21	(2x12)+21	(2x18)+24	(2x9)+12+21	(4x12)	(3x9)+12+21			
(2x18)	9+12+24	12+18+21	(2x9)+(2x18)	(2x18)	9+12+24	(2x12)+24	18+(2x21)	(2x9)+12+24	(3x12)+18				
18+21	9+(2x18)	(3x18)	9+(3x12)	18+21	9+(2x18)	12+(2x18)	(3x21)	(2x9)+(2x18)	(3x12)+21				
18+24			9+(4x12)+18	18+24				(2x9)+18+21	(3x12)+24				
(2x21)			(4x12)	(2x21)				(2x9)+18+24	(2x12)+(2x18)				
21+24				21+24				(2x9)+(2x21)	(2x12)+18+21				
(2x24)				(2x24)				9+(3x12)					

SINGLE CONNECTION OUTDOOR	MCHD050A8 (+ MADM Module)												
	142- COMBINATIONS												
	2 UNITS		3 UNITS			4 UNITS			5 UNITS		6 UNITS		7 UNITS
	9+18	(3x9)	9+(2x21)	12+(2x24)	(4x9)	9+(3x12)	9+18+21+24	(5x9)	(3x9)+18+24	9+(4x12)	(6x9)	(7x9)	
	9+21	(2x9)+12	9+21+24	(3x18)	(3x9)+12	9+(2x12)+18	(4x12)	(4x9)+12	(3x9)+(2x21)	9+(3x12)+18	(5x9)+12	(6x9)+12	
	9+24	(2x9)+18	9+(2x24)	(2x18)+21	(3x9)+18	9+(2x12)+21	(3x12)+18	(4x9)+18	(3x9)+21+24	9+(3x12)+21	(5x9)+18	(6x9)+18	
	(2x12)	(2x9)+21	(3x12)	(2x18)+24	(3x9)+21	9+(2x12)+24	(4x21)	(4x9)+21	(2x9)+(3x12)	9+(3x12)+24	(5x9)+21	(5x9)+(2x12)	
	12+18	(2x9)+24	(2x12)+18	18+(2x21)	(3x9)+24	9+12+(2x18)	(3x12)+24	(4x9)+24	(2x9)+(2x12)+18	9+(2x12)+(2x18)	(5x9)+24	(4x9)+(3x12)	
	12+21	9+(2x12)	(2x12)+21	18+21+24	(2x9)+(2+12)	9+12+18+21	(2x12)+(2x18)	(3x9)+(2x12)	(2x9)+(2x12)+21	9+(2x12)+18+21	(4x9)+(2x12)	8 UNITS	
	12+24	9+12+18	(2x12)+24	(2x21)+21	(2x9)+12+18	9+12+18+24	(2x12)+18+21	(3x9)+12+18	(2x9)+(2x12)+24	(5x12)	(4x9)+12+18	(8x9)	
(2x18)	9+12+21	12+(2x18)	(2x21)+24	(2x9)+12+21	9+12+(2x21)	(2x12)+18+24	(3x9)+12+21	(2x9)+12+(2x18)	(4x12)+18	(4x9)+12+21			
18+21	9+12+24	12+18+21	21+(2x24)	(2x9)+12+24	9+12+21+24	(2x12)+21+21	(3x9)+12+24	(2x9)+12+18+21	(2x12)+21	(4x9)+12+24			
18+24	9+(2x18)	12+18+24	(3x24)	(2x9)+(2x18)	9+12+(2x24)	(2x12)+24+24	(3x9)+(2x18)	(2x9)+12+18+24	(4x12)+24	(3x9)+(3x12)			
(2x21)	9+18+21	12+(2x21)		(2x9)+18+21	9+(3x18)	12+(3x18)	(3x9)+18+21	(2x9)+12+(2x21)	(3x12)+(2x18)	(3x9)+(2x12)+18			
21+24	9+18+24	12+21+24		(2x9)+18+24	9+(2x18)+21	12+(2x18)+21		(2x9)+12+(2x21)		(3x9)+(2x12)+21			
(2x24)				(2x9)+(2x21)	9+(2x18)+24	12+(2x18)+24				(2x9)+(4x12)			
				(2x9)+21+24	9+18+(2x21)	12+18+(2x21)				(2x9)+(3x12)+18			

SINGLE CONNECTION OUTDOOR	MCHD060A9 (+ MADM Module)													
	215- COMBINATIONS													
	2 UNITS		3 UNITS			4 UNITS			5 UNITS		6 UNITS		7 UNITS	8 UNITS
	9+18	(2x9)+12	(2x12)+24	(4x9)	9+12+18+21	(2x12)+18+21	(5x9)	(2x9)+(2x18)+21	(6x9)	(3x9)+12+(2x18)	(7x9)	(8x9)		
	9+21	9+18	12+(2x18)	(3x9)+12	9+12+18+24	(2x12)+18+21	(4x9)+12	(2x9)+(2x18)+24	(5x9)+12	(3x9)+12+18+21	(6x9)+12	(7x9)+12		
	9+24	(2x9)+21	12+18+21	(3x9)+18	9+12+(2x21)	(2x12)+(2x21)	(4x9)+18	(2x9)+18+(2x21)	(5x9)+18	(3x9)+12+18+24	(6x9)+18	(7x9)+18		
	12+18	(2x9)+24	12+18+24	(3x9)+21	9+12+21+24	(2x12)+21+21	(4x9)+21	(2x9)+18+21+24	(5x9)+21	(3x9)+12+(2x21)	(6x9)+21	(6x9)+(2x12)		
	12+21	9+(2x12)	12+(2x21)	(3x9)+24	9+12+(2x24)	(2x12)+(2x24)	(4x9)+24	9+(4x12)	(5x9)+24	(2x9)+(4x12)	(6x9)+24	(5x9)+(3x12)		
	12+24	9+12+18	12+21+24	(2x9)+(2x12)	9+(3x18)	12+(3x18)	(3x9)+(2x12)	9+(3x12)+18	(4x9)+(2x12)	(2x9)+(3x12)+18	(5x9)+(2x12)			
	(2x18)	9+12+21	12+(2x24)	(2x9)+12+18	9+(2x18)+21	12+(2x18)+21	(3x9)+12+18	9+(3x12)+21	(4x9)+12+18	(2x9)+(2x12)+12+	(5x9)+12+18	9 UNITS		
18+21	9+12+24	(3x18)	(2x9)+12+21	9+(2x18)+24	12+(2x18)+21	(3x9)+12+21	9+(3x12)+24	(4x9)+12+21	(2x9)+(2x12)+12+	(5x9)+12+21	(9x9)			
18+24	9+(2x18)	(2x18)+21	(2x9)+12+24	9+18+(2x21)	12+18+(2x21)	(3x9)+12+24	9+(2x12)+(2x18)	(4x9)+12+24	(2x9)+(2x12)+(2x18)	(5x9)+12+24				
(2x21)	9+18+21	(2x18)+24	(2x9)+(2x18)	9+18+21+24	12+18+21+24	(3x9)+(2x18)	9+(2x12)+18+21	(4x9)+(2x18)	(2x9)+(2x12)+18+	(5x9)+(2x18)				
21+24	9+18+24	18+(2x21)	(2x9)+18+21	9+18+(2x24)	12+18+(2x24)	(3x9)+18+21	9+(2x12)+18+24	(4x9)+18+21	9+(5x12)	(4x9)+(3x12)				
(2x24)	9+(3x21)	18+21+24	(2x9)+18+24	9+(3x21)	12+(3x21)	(3x9)+18+24	9+(2x12)+(2x21)	(4x9)+18+24	9+(4x12)+18	(4x9)+(2x12)+18				
	9+21+24	18+(2x24)	(2x9)+(2x21)	9+(2x21)+24	12+(2x21)+21	(3x9)+(2x21)	9+(2x12)+21+24	(4x9)+(2x21)	9+(4x12)+21	(4x9)+(2x12)+21				
	9+(2x24)	(3x21)	(2x9)+21+24	9+21+(2x24)	12+21+(2x24)	(3x9)+21+24	9+(2x12)+(2x24)	(4x9)+21+24	9+(4x12)+24	(3x9)+(4x12)				
	(3x12)	(3x21)+24	(2x9)+(2x24)	9+(3x24)	(4x18)	(2x9)+(3x12)	(5x12)	(3x9)+(2x12)+12	9+(3x12)+(2x18)	(3x9)+(3x12)+18				
(2x12)+18	21+(2x24)		9+(3x12)	(4x12)	(3x18)+21	(2x9)+(2x12)+18	(4x12)+18	(3x9)+(2x12)+18	(6x12)	(2x9)+(5x12)				
(2x12)+21	(3x24)		9+(2x12)+18	(3x12)+18	(3x18)+24	(2x9)+(2x12)+21	(4x12)+21	(3x9)+(2x12)+21	(5x12)+18	9+(6x12)				
			9+(2x12)+21	(3x12)+21	(2x18)+(2x21)	(2x9)+(2x12)+24	(4x12)+24	(3x9)+(2x12)+24	(5x12)+21					
			9+(2x12)+24	(3x12)+24	(2x18)+21+21	(2x9)+12+(2x18)	(3x12)+(2x18)							
			9+12+(2x18)	(2x12)+(2x18)	18+(2x21)	(2x9)+12+18+21	(3x12)+18+21							
						(2x9)+12+18+24	(3x12)+18+24							
						(2x9)+12+(2x21)	(3x12)+(2x21)							
						(2x9)+12+21+24	(3x12)+21+24							
						(2x9)+12+(2x24)	(2x12)+(3x18)							
						(2x9)+(3x18)	(2x12)+(2x18)+21							