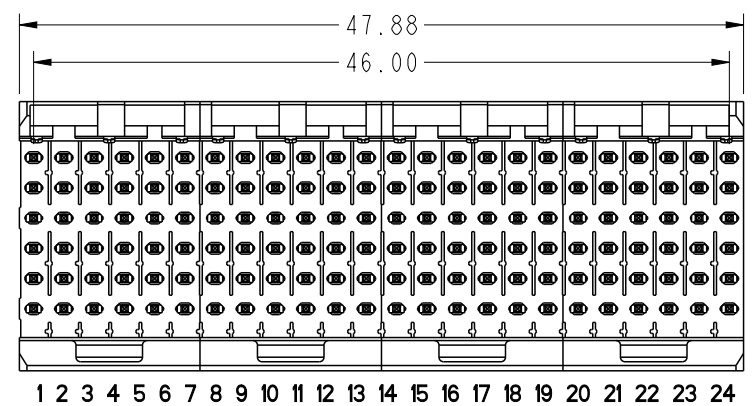
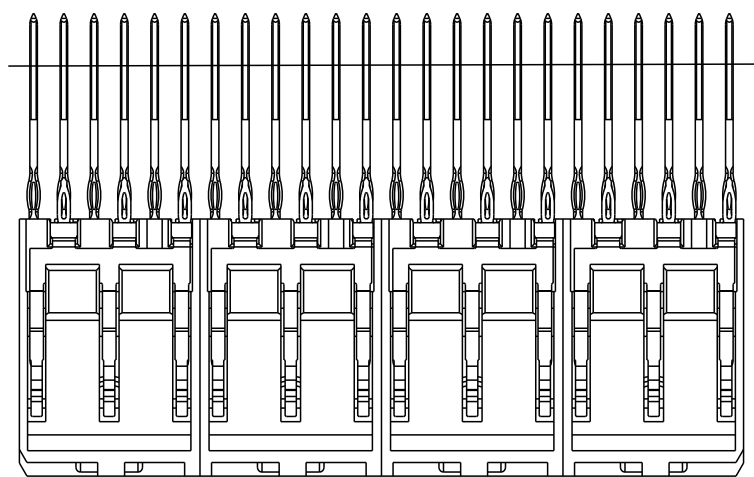
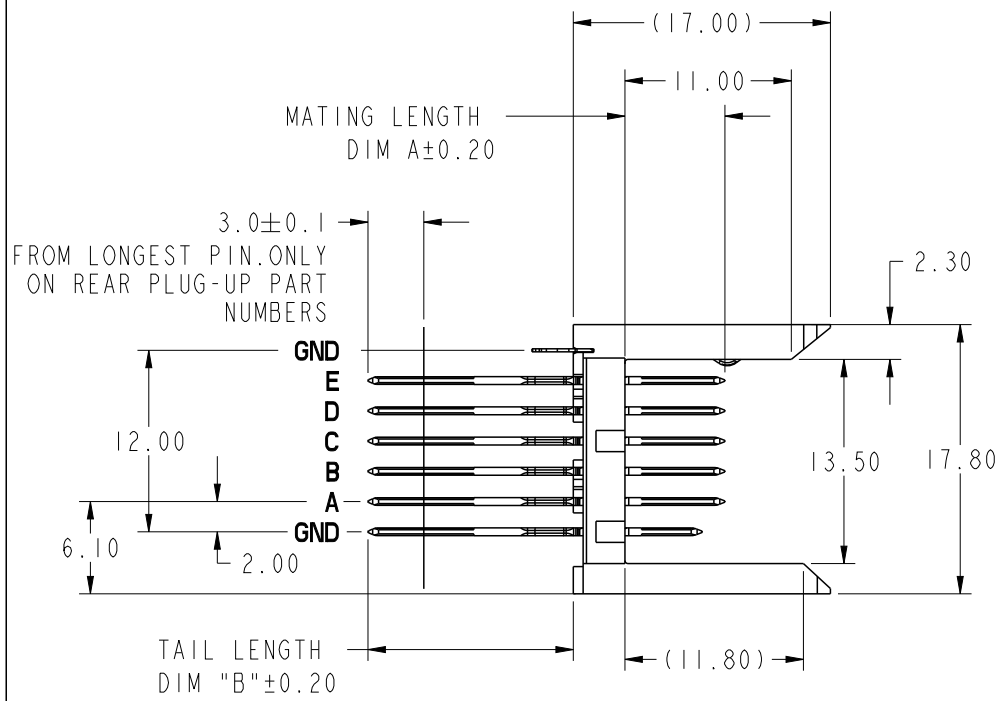


PRODUCT NUMBER	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
63779-XZZZ(L)LF	84818-X04LF

X REFER PLATING PERFORMANCE SEE NOTE 6

L REFER LUBRICATED (OPTIONAL) SEE NOTE 6

X REFER PLATING PERFORMANCE SEE NOTE 6



spec ref		dr P-Mathew Nebu 2011/05/20		projection	MM	size A4	scale 1:1
tolerance std ISO 406 ISO 1101		eng Rahul Mohan-M 2021/08/25				ecn no ELX-I-41555-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -				rel level Released	
surface ISO 1302		appr Kuriakose, San 2021/08/25		product family METRAL 1000		rev V	
linear	0.X	±0.3	Amphenol FCI	VERTICAL SIGNAL HDR 5 ROW		63779	
	0.XX	±0.13					
0.XXX	±0.050						
angular	0°	±2°	amphenol-icc.com	cat. no. Product - Customer Drw		sheet 1 of 7	

Creo F114-ELX-MC-ACC, REV F, 2020-12-21

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C,D,E	GROUND ROW	ROWS:A,B,D,E	ROW C	GROUND ROW **
01*	5.00	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
22		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
30		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
05		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
35		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
48		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
40		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
65		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
09		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
02*	5.75	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
44		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
31		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
06		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
36		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
49		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
25		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
66		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
10		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
03*		6.50	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
45	12.20		2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
32	12.95		2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
07	13.70		2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
37	14.45		3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
50	15.20		3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
41	15.70		4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
24	16.40		5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
11	17.10		5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10

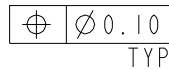
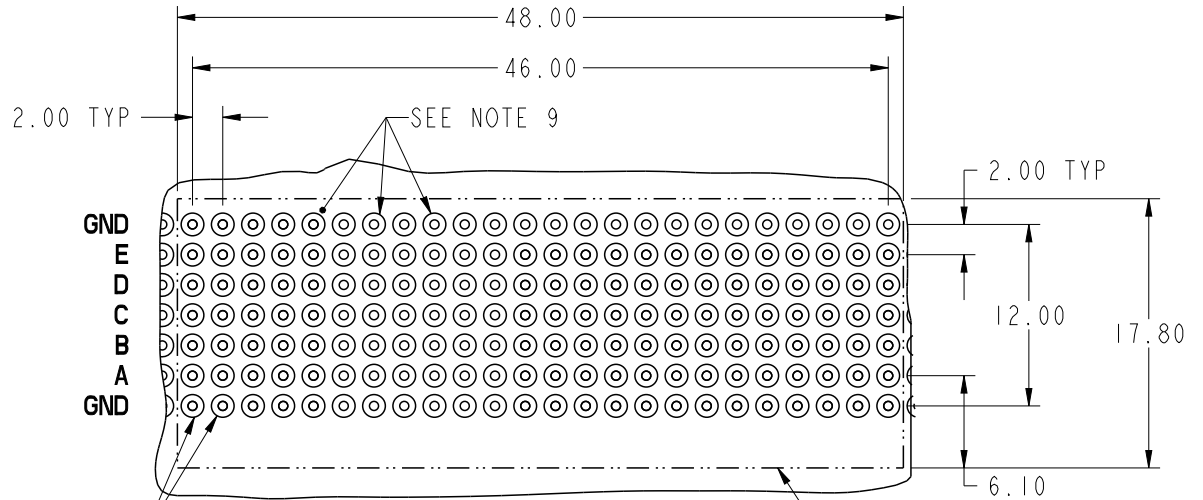
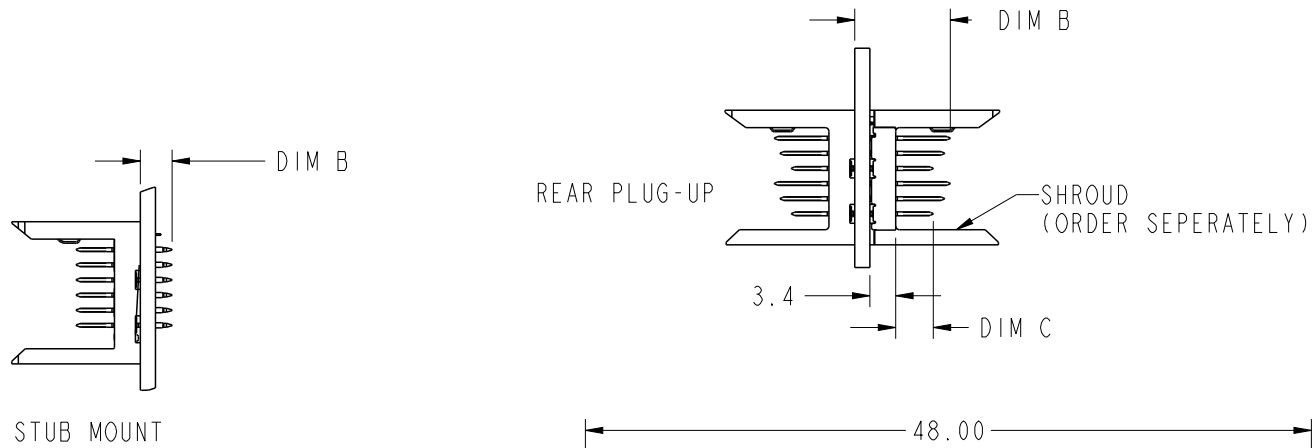
\* STUB PINS - NO REAR PLUG-UP  
 \*\* THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF PIN 'GND' IS ONE SIZE SHORTER THAN THE OTHER PINS.

spec ref		dr	P-Mathew Nebu		2011/05/20		projection 	MM 	size	A4		scale	1:1	
tolerance std		eng	Rahul Mohan-M		2021/08/25				ecn no	ELX-I-41555-1				
ISO 406 ISO 1101		chr	-		-				rel level	Released				
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Kuriakose, San		2021/08/25		product family	METRAL 1000						
surface ISO 1302	linear	0.X	±0.3		Amphenol FCI	VERTICAL SIGNAL HDR 5 ROW				dwg no	63779		rev V	
		0.XX	±0.13			P.F. 120 POS. SELECT LOAD STD								
		0.XXX	±0.050			cat. no.								
angular		0°	±2°		amphenol-icc.com		Product - Customer Drw				sheet 2 of 7			

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C,D,E	GROUND ROW	ROWS:A,B,D,E	ROW C	GROUND ROW **
04*	7.25	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
46		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
33		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
08		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
38		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
51		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
42		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
67		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
12		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
19*	8.00	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
47		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
34		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
20		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
39		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
52		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
43		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
68		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
21		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10

\* STUB PINS - NO REAR PLUG-UP  
 \*\* THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF PIN 'GND' IS ONE SIZE SHORTER THAN THE OTHER PINS.

spec ref		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	1:1
tolerance std		eng	Rahul Mohan-M	2021/08/25			ecn no	ELX-I-41555-1		
ISO 406 ISO 1101		chr	-	-			rel level	Released		
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Kuriakose, San	2021/08/25	product family		METRAL 1000			
surface	linear	0.X	±0.3	Amphenol FCI	VERTICAL SIGNAL HDR 5 ROW		dwg no	63779	rev	V
		0.XX	±0.13							
		0.XXX	±0.050							
ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.	Product - Customer Drw		sheet 3 of 7		



SHOWN FROM HEADER SIDE  
OF CIRCUIT BOARD  
FOR PTH DETAILS REFER DRAWING 58351

CONNECTOR OUTLINE  
SEE NOTE 10

spec ref		dr P-Mathew Nebu 2011/05/20		projection 	MM ←→	size A4	scale 1:1
tolerance std ISO 406 ISO 1101		eng Rahul Mohan-M 2021/08/25				ecn no ELX-I-41555-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -				rel level Released	
surface		appr Kuriakose, San 2021/08/25		product family METRAL 1000		rev	
ISO 1302	linear	0.X	±0.3	Amphenol FCi	VERTICAL SIGNAL HDR 5 ROW		63779
		0.XX	±0.13				
		0.XXX	±0.050				
	angular	0°	±2°	amphenol-icc.com	P.F. 120 POS. SELECT LOAD STD		V
cat. no.				Product - Customer Drw		sheet 4 of 7	

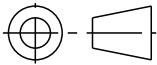
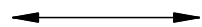

SELECT LOAD PATTERNS

PRODUCT #	ROW	COLUMN																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
63779-X001LF	E	03	02	02	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	02	02	03
	D	03	02	02	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	02	02	03
	C	03	02	02	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	02	02	03
	B	03	02	02	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	02	02	03
	A	03	02	02	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	02	02	03
	GND	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01
PRODUCT #	ROW	COLUMN																							
63779-X002LF SEE NOTE 11 *RPU**	E	55	02	02	02	02	55	55	55	02	02	02	02	55	55	55	55	55	55	02	02	02	02	55	55
	D	55	02	02	02	02	55	55	55	02	02	02	02	55	55	55	55	55	55	02	02	02	02	55	55
	C	55	02	02	02	02	55	55	55	02	02	02	02	55	55	55	55	55	55	02	02	02	02	55	55
	B	55	02	02	02	02	55	55	55	02	02	02	02	55	55	55	55	55	55	02	02	02	02	55	55
	A	55	02	02	02	02	55	55	55	02	02	02	02	55	55	55	55	55	55	02	02	02	02	55	55
	GND	55	02	02	02	02	55	55	55	02	02	02	02	55	55	55	55	55	55	02	02	02	02	55	55
PRODUCT #	ROW	COLUMN																							
63779-X003LF SEE NOTE 11 *RPU**	E	55	55	02	02	02	02	55	55	55	55	55	55	55	55	55	55	55	55	02	02	02	02	55	55
	D	55	55	02	02	02	02	55	55	55	55	55	55	55	55	55	55	55	55	02	02	02	02	55	55
	C	55	55	02	02	02	02	55	55	55	55	55	55	55	55	55	55	55	55	02	02	02	02	55	55
	B	55	55	02	02	02	02	55	55	55	55	55	55	55	55	55	55	55	55	02	02	02	02	55	55
	A	55	55	02	02	02	02	55	55	55	55	55	55	55	55	55	55	55	55	02	02	02	02	55	55
	GND	55	55	02	02	02	02	55	55	55	55	55	55	55	55	55	55	55	55	02	02	02	02	55	55

\*\* NOT A POSSIBLE METRAL 1000 OR 4000 REAR PLUG-UP PART NUMBER, SPECIAL APPLICATION.

\*\* NOT A POSSIBLE METRAL 1000 OR 4000 REAR PLUG-UP PART NUMBER, SPECIAL APPLICATION.

\*REAR PLUG-UP PART NUMBER

spec ref		dr <b>P-Mathew Nebu</b>		2011/05/20		projection		size <b>MM</b>		scale <b>A4</b>	
tolerance std		eng <b>Rahul Mohan-M</b>		2021/08/25						ecn no <b>ELX-I-41555-1</b>	
ISO 406 ISO 1101		chr <b>-</b>		<b>-</b>						rel level <b>Released</b>	
surface		appr <b>Kuriakose, San</b>		2021/08/25		product family <b>METRAL HS</b>		rev <b>V</b>		sheet 5 of 7	
TOLERANCES UNLESS OTHERWISE SPECIFIED linear: 0.X ±0.3, 0.XX ±0.13, 0.XXX ±0.050 angular: 0° ±2°				VERTICAL SIGNAL HDR 5 ROW P.F. 120 POS. SELECT LOAD STD		dwg no <b>63779</b>					
ISO 1302		amphenol-icc.com		cat. no.		Product - Customer Drw					

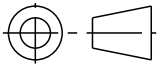


SELECT LOAD PATTERNS

PRODUCT #	ROW	COLUMN																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
63779-X004LF	E	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02
	C	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02
	A	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02

PRODUCT #	ROW	COLUMN																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
63779-X005LF	E	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	
	D	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	
	C	04	02	02	02	02	02	04	02	02	02	02	02	01	02	02	02	02	02	04	02	02	02	02	
	B	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	
	A	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	
	GND	-	02	02	02	02	-	-	02	02	02	02	-	-	02	02	02	02	-	-	02	02	02	02	

PRODUCT #	ROW	COLUMN																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
63779-X006LF *RPU	E	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	01	01	01	
	D	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	01	01	01	
	C	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	01	01	01	
	B	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	
	A	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	
	GND	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	

\*REAR PLUG-UP PART NUMBER

spec ref		dr <b>P-Mathew Nebu</b>		2011/05/20		projection		size <b>A4</b>		scale <b>1:1</b>	
tolerance std		eng <b>Rahul Mohan-M</b>		2021/08/25						ecn no <b>ELX-I-41555-1</b>	
ISO 406 ISO 1101		chr <b>-</b>		-						rel level <b>Released</b>	
surface		appr <b>Kuriakose, San</b>		2021/08/25		product family <b>METRAL HS</b>		dwg no <b>63779</b>		rev <b>V</b>	
TOLERANCES UNLESS OTHERWISE SPECIFIED linear: 0.X ±0.3, 0.XX ±0.13, 0.XXX ±0.050 angular: 0° ±2°				VERTICAL SIGNAL HDR 5 ROW P.F. 120 POS. SELECT LOAD STD				Product - Customer Drw		sheet 6 of 7	
ISO 1302		amphenol-icc.com		cat. no.							

NOTES:

1. SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
2. SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
3. SEE FCI PUBLICATION 950511-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5, 1994
5. MATERIAL : BODY : THERMOPLASTIC UL94-V0.  
: CONTACT : COPPER ALLOY.
6. FOR PLATING PERFORMANCE REFER DRAWING # 10159408.
7. DIMENSIONAL RESTRICTIONS OF PINS IN HEADERS.  
FOR MATING WITH METRAL 1000 RECEPTACLES  
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROWS A-E  
DIM A : 5.00mm MIN, 5.75mm MAX FOR ROW GND NEXT TO ROW A  
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROWS A-E  
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A  
FOR MATING WITH METRAL 4000 RECEPTACLES  
DIM A : 5.00mm MIN, 6.50mm MAX FOR ROWS A, B, D & E  
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROW C  
DIM A : 5.00mm MIN, 5.75mm MAX FOR ROW GND NEXT TO ROW A  
DIM C : 5.00mm MIN, 7.00mm MAX FOR ROWS A, B, D & E  
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROW C  
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A
8. THE MIN PCB THICKNESS FOR REAR PLUG-UP APPLICATIONS IS 2.9mm SINCE THE COMPLIANT SECTIONS OF THE GROUND SPRING OF THE HEADER DIRECTLY OPPOSE THE GROUND SPRING OF THE SHROUD. THE MIN PCB THICKNESS FOR FRONT PLUG-UP ONLY APPLICATIONS IS 1.6mm.
9. THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
10. THE 'CONNECTOR OUTLINE' IS THE MIN OUTLINE REQUIRED. TO DETERMINE THE OUTLINE NECESSARY TO PERMIT THE VARIOUS TYPES OF REPAIR OPERATIONS, SEE APPLICATION SPECIFICATION GS-20-010.
11. PIN CODE 55 CANNOT BE USED WITH METRAL 1000 SHROUDS. PIN CODE 55 HAS A DIM A=5.75mm, DIM B=11.55mm.
12. THE PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.
13. ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN
14. A  $\Delta$ SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

Amphenol FCI

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spec ref		dr	P-Mathew Nebu		2011/05/20	projection 	MM 	size	A4		scale	1:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M		2021/08/25			ecn no	ELX-I-41555-1				
		chr	-		-				rel level	Released			
ISO 406	linear	appr	Kuriakose, San		2021/08/25	product family		METRAL HS					
ISO 1101		surface	Amphenol FCI		title	VERTICAL SIGNAL HDR 5 ROW		dwg no	63779		rev	V	
ISO 1302													
amphenol-icc.com		cat. no.		Product - Customer Drw				sheet 7 of 7					