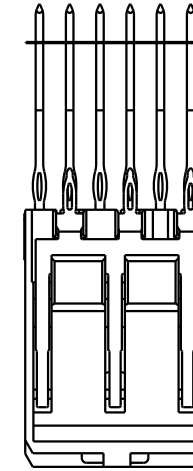
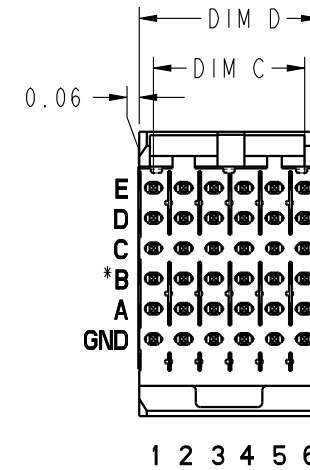
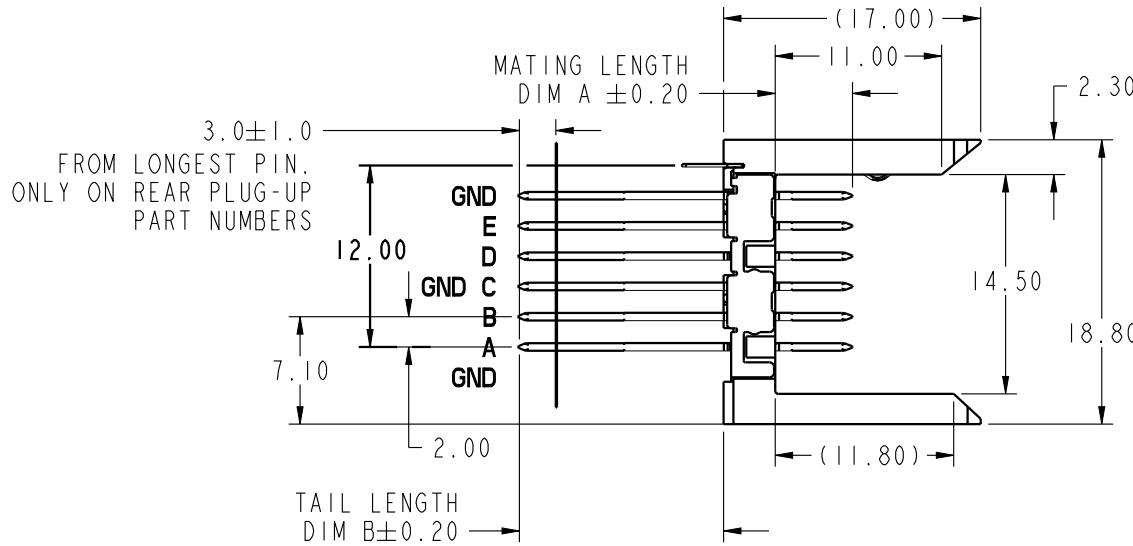
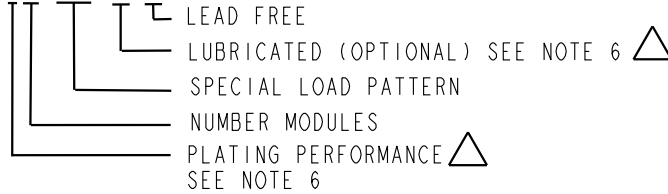


PRODUCT NUMBER	DIM C	DIM D	SHROUD P/N FOR REAR PLUG UP APPLICATIONS
84809-X01ZZZ(L)LF	10.00	11.88	84811-X01LF
84809-X02ZZZ(L)LF	22.00	23.88	84811-X02LF
84809-X03ZZZ(L)LF	34.00	35.88	84811-X03LF
84809-X04ZZZ(L)LF	46.00	47.88	84811-X04LF

***ROW C INFORMATION**
 ODD NUMBER COLUMNS WITHIN ROW C ARE COMMONED TO GROUND INTERNALLY WITHIN THE HOUSING. THE EVEN NUMBER COLUMNS WITHIN ROW C ARE NOT. FOR MAXIMUM PERFORMANCE IT IS RECOMMENDED THESE EVEN COLUMNS BE GROUND COMMONED WITHIN PCB. SEE NOTE 11



PART NUMBER : 84809-XYZZZ(L)LF



spec ref		dr P-Mathew Nebu		2011/05/20		projection		size A4		scale 1:1	
tolerance std		eng Rahul Mohan-M		2021/07/21						ecn no ELX-I-41714-1	
ISO 406 ISO 1101		chr -		-						rel level Released	
surface		appr Kuriakose, San		2021/08/16		product family METRAL 2000		84809		rev V	
TOLERANCES UNLESS OTHERWISE SPECIFIED		Amphenol FCI		title VERTICAL SIGNAL HDR. 5 ROW		dwg no		84809		sheet 1 of 6	
ISO 1302		amphenol-icc.com		cat. no.		Product - Customer Drw					
linear		0.X ±0.3		0.XX ±0.13		0.XXX ±0.050					
angular		0° ±2°									

Creo F114:ELX-FCI-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, AND E	GROUND ROW	ROWS: A, B, D, AND 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	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 THEN 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	2021/07/21			ecn no	ELX-I-41714-1				
ISO 406 ISO 1101		chr	-	-			rel level	Released				
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Kuriakose, San	2021/08/16	product family		METRAL 2000					
surface	linear	0.X	±0.3	Amphenol FCI	VERTICAL SIGNAL HDR. 5 ROW			dwg no	84809		rev	V
		0.XX	±0.13		P.F. SPECIAL LOAD EXT.							
		0.XXX	±0.050									
ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.	Product - Customer Drw			sheet 2 of 6			

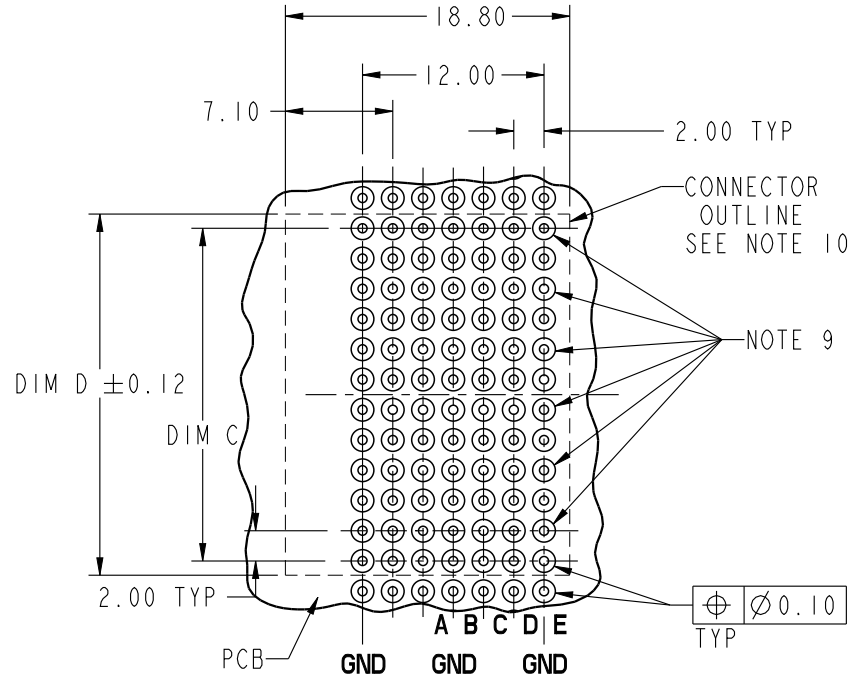
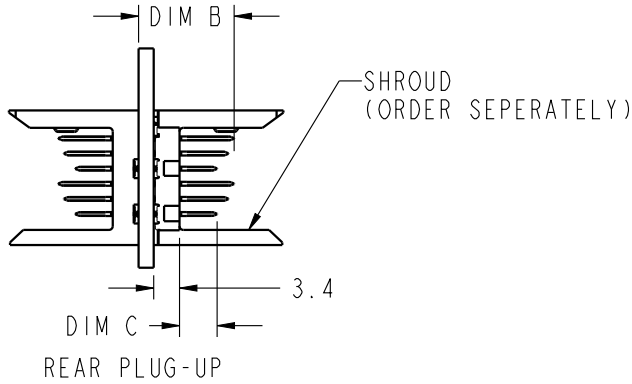
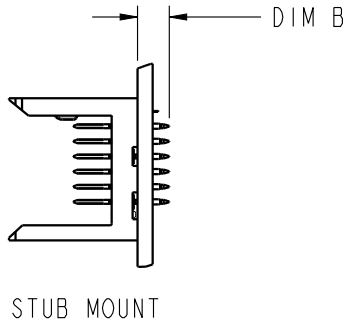
PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS: A, B, C, D, AND E	GROUND ROW	ROWS: A, B, D, AND E	ROW C	GROUND ROW
04*	7.25	4.30	1.60 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 THEN 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	2021/07/21			ecn no	ELX-I-41714-1			
ISO 406 ISO 1101		chr	-	-			rel level	Released			
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Kuriakose, San	2021/08/16	product family		METRAL 2000				
surface	linear	0.X	±0.3	Amphenol FCI	VERTICAL SIGNAL HDR. 5 ROW			dwg no	84809	rev	V
		0.XX	±0.13		P.F. SPECIAL LOAD EXT.						
		0.XXX	±0.050		cat. no.						
ISO 1302	angular	0°	±2°	amphenol-icc.com	Product - Customer Drw			sheet 3 of 6			

PRODUCT NUMBER
SEE SHEET 1



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

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 2021/07/21				ecn no ELX-I-41714-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -				rel level Released	
surface		appr Kuriakose, San 2021/08/16		product family METRAL 2000		rev	
ISO 1302 ✓	linear	0.X	±0.3	Amphenol FCi title VERTICAL SIGNAL HDR. 5 ROW P.F. SPECIAL LOAD EXT.		dwg no 84809	
		0.XX	±0.13				
		0.XXX	±0.050				
	angular	0°	±2°	amphenol-icc.com cat. no.		Product - Customer Drw sheet 4 of 6	

PRODUCT NUMBER

SEE SHEET 1

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 Y14.5M, 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 0.000
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. FOR FRONT PLUG-UP APPLICATIONS, THE EVEN NUMBERED PINS IN ROW 'C' CAN BE USED FOR POWER AS WELL AS FOR GROUND. IF THE SURROUNDING PINS ARE NOT USED FOR POWER, THEN EACH PIN CAN CARRY 3 AMPS. IF THE SURROUNDING PINS ARE USED FOR POWER, THEN EACH PIN CAN CARRY 1 AMP. WHEN THE SURROUNDING PINS ARE USED ONLY FOR LOW SPEED SIGNALS, THEN THE EVEN NUMBERED 'C' ROW PINS CAN ALSO BE USED FOR LOW SPEED SIGNALS. THIS IS NOT TRUE FOR REAR PLUG-UP APPLICATIONS USING METRAL 2000 SHROUD AS IN THIS CASE ALL 'C' ROW PINS ARE COMMON TO GROUND.
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 Δ 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	2021/07/21			ecn no	ELX-I-41714-1		
		chr	-	-			rel level	Released		
ISO 406 ISO 1101		appr	Kuriakose, San	2021/08/16	product family		METRAL 2000		rev	
surface	linear	0.X	±0.3	Amphenol FCI	title	VERTICAL SIGNAL HDR. 5 ROW		dwg no	84809	
		0.XX	±0.13			P.F. SPECIAL LOAD EXT.				
		0.XXX	±0.050			cat. no.	Product - Customer Drw		sheet 5 of 6	
ISO 1302	angular	0°	±2°	amphenol-icc.com						

Creo F-114-ELX-NC-AAC, REV F, 2020-12-21

SPECIAL LOAD PATTERNS

PRODUCT #	ROW	PIN CODES
84809-XXX001LF	E	01
	D	
	C	
	B	
	A	
	GND	
84809-XXX007LF *RPU	E	40
	D	
	C	
	B	
	A	
	GND	
84809-XXX011LF	E	02
	D	
	C	
	B	
	A	01
	GND	
84809-XXX050LF	E	01
	D	02
	C	01
	B	
	A	
	GND	
84809-XXX051LF *RPU	E	31
	D	
	C	
	B	22
	A	
	GND	

84809-XXX052LF

E	03
D	
C	
B	
A	
GND	02

*REAR PLUG-UP PART NUMBER

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
6.00mm - 7.30 mm

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
2.95mm - 4.20mm

spec ref		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	1:1
tolerance std		eng	Rahul Mohan-M	2021/07/21			ecn no	ELX-I-41714-1		
ISO 406 ISO 1101		chr	-	-			rel level	Released		
surface	linear	0.X	±0.3	Amphenol FCI	title VERTICAL SIGNAL HDR. 5 ROW P.F. SPECIAL LOAD EXT.		dwg no	84809		rev V
		0.XX	±0.13							
		0.XXX	±0.050							
ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.	Product - Customer Drw	sheet 6 of 6			