

MAGNEX™ INTERRUPTER TCC CURVES AT VARIOUS TEMPERATURES

The published **Time Current Characteristic (TCC) Curves** for the **MagneX™ Interrupter** are defined for operation in 25° C oil. A derating factor for the MagneX™ Interrupter operation in higher oil temperatures is 0.7 percent per °C above the rated 25° C. (In accordance with CP-8808, Predictability of RTE MagneX™ Interrupter Performance).

Depending on individual practices, coordination of the MagneX™ Interrupter with upstream devices may be completed at normal operating temperatures, which are typically above 25° C. To assist in this type of coordination, we have developed TCC Curves at various temperatures:

25° C	100° C
40° C	120° C
60° C	140° C
80° C	

The curves are shifted in accordance with the 0.7% per °C deration factor. The curves are calculated and redrawn from drawing No. 38442 dated 9-18-87. (The curves are NOT a direct result of testing.)

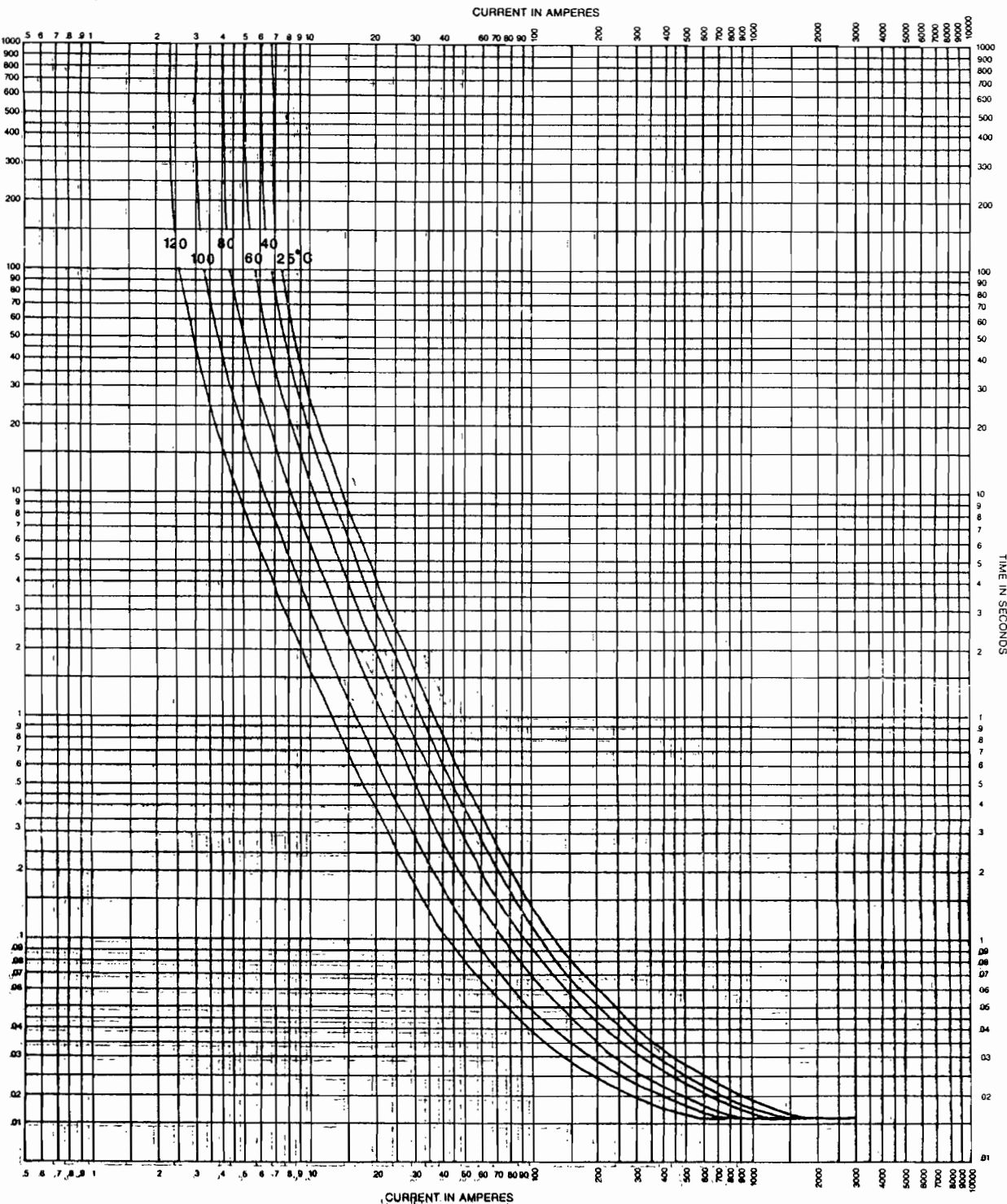
Two sets of TCC Curves are attached:

SET NO. 1

- Maximum Trip Curves of MagneX™ Elements No. 1 thru No. 9 (Drawing No. 01 TEMP thru 09 TEMP)

SET NO. 2

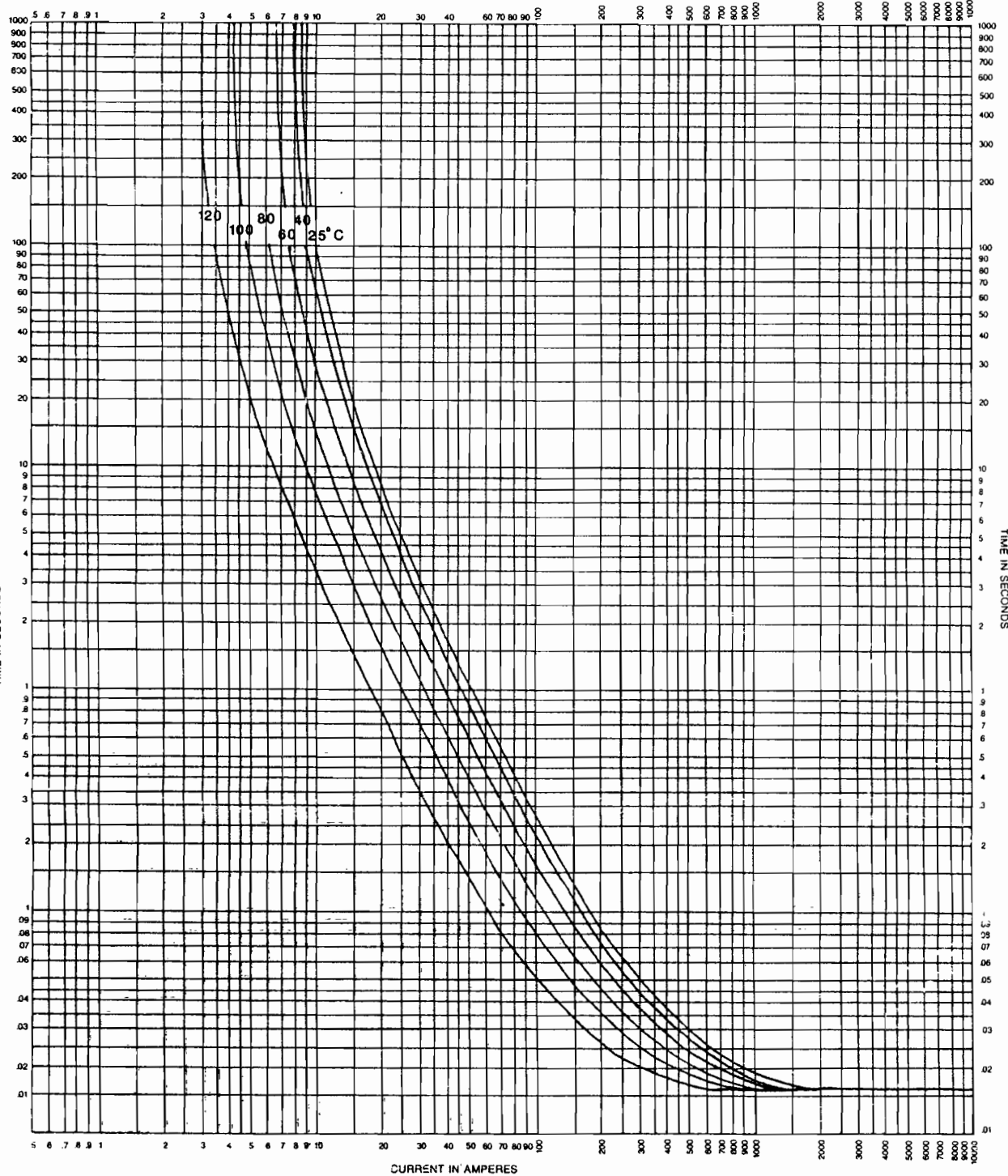
- Maximum Trip Curves of Magnex™ Elements No. 1 thru No. 9 in Series with an Under-Oil Current Limiting ELSP Fuse (Drawing No. 01 ELSP thru 09 ELSP).



RTE COMPONENTS		MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER	
1045 Hickory Street Pewaukee, Wisconsin 53072		ELEMENT NO. 01 @ VARIOUS TEMPERATURES	
Tests made at		Volts ac at LOW	pf @ 25° C with no initial load
Standards used as basis for data		ANSI	C37.47 (1981)
DWN VJS	CHKD <i>Jm</i>	ISSUED	Date 4-7-88 No. 01 TEMP
4-8-88	4-13-88		
SCALE	.42 38,556	B	00

NOTE: THE CURVES ARE SHIFTED 0.7% / °C ABOVE 25° C FROM A BASE CURVE OF 25° C
 PER RTE DRAWING NO. 38442 DATED 9-18-87

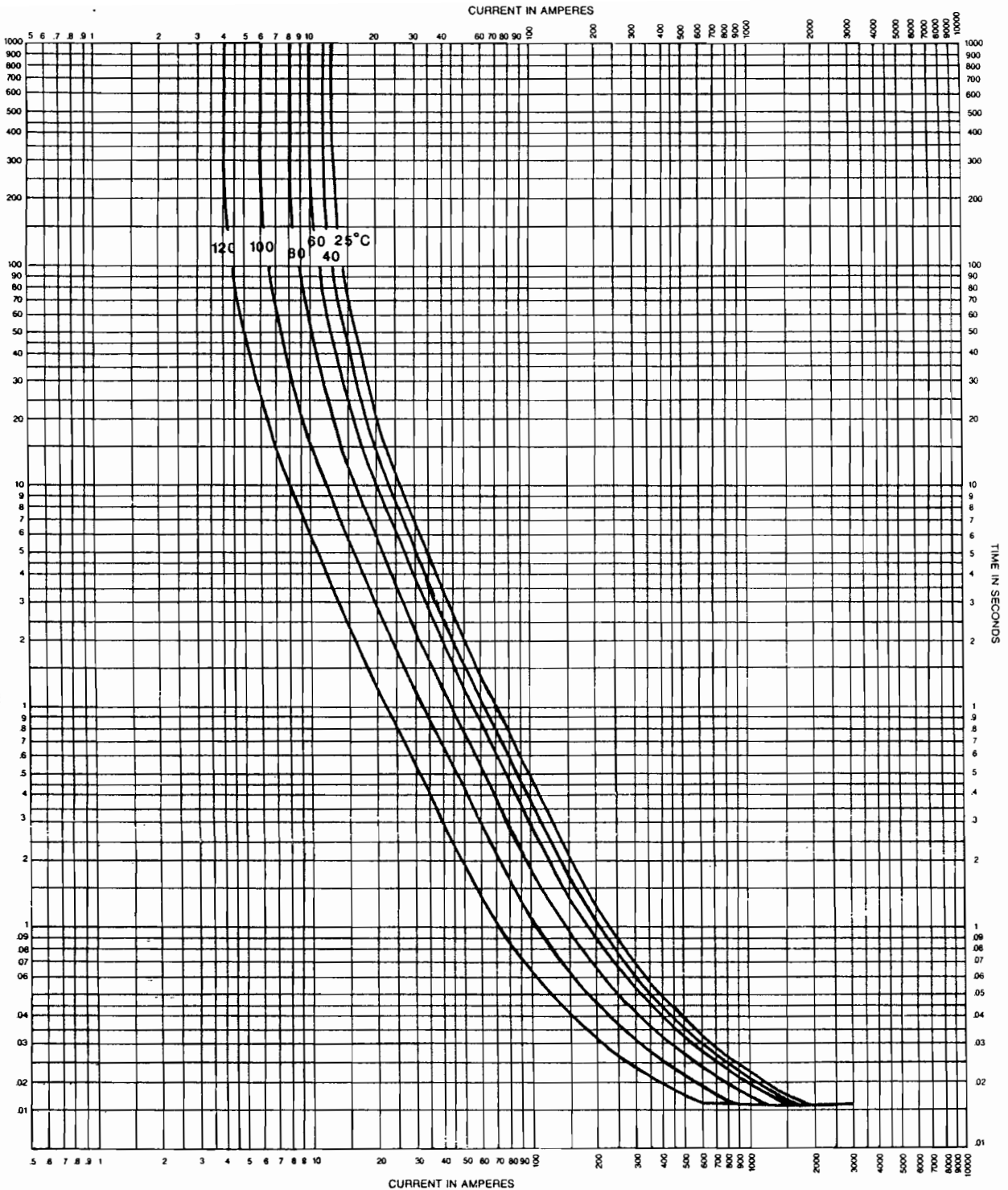
CURRENT IN AMPERES



CURRENT IN AMPERES

RTE COMPONENTS				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
1045 Hickory Street Pewaukee, Wisconsin 53072				ELEMENT NO. 02 @ VARIOUS TEMPERATURES			
Tests made at		Volts ac at LOW		pf		@ 25° C with no initial load	
Standards used as basis for data				ANSI C37.47 (1981)			
DWN	VJS	CH'KD <i>Am</i>	ISSUED	Date 4-7-88 No. 02 TEMP			
4-8-88		4-13-88					
SCALE	42	38557	B	00			

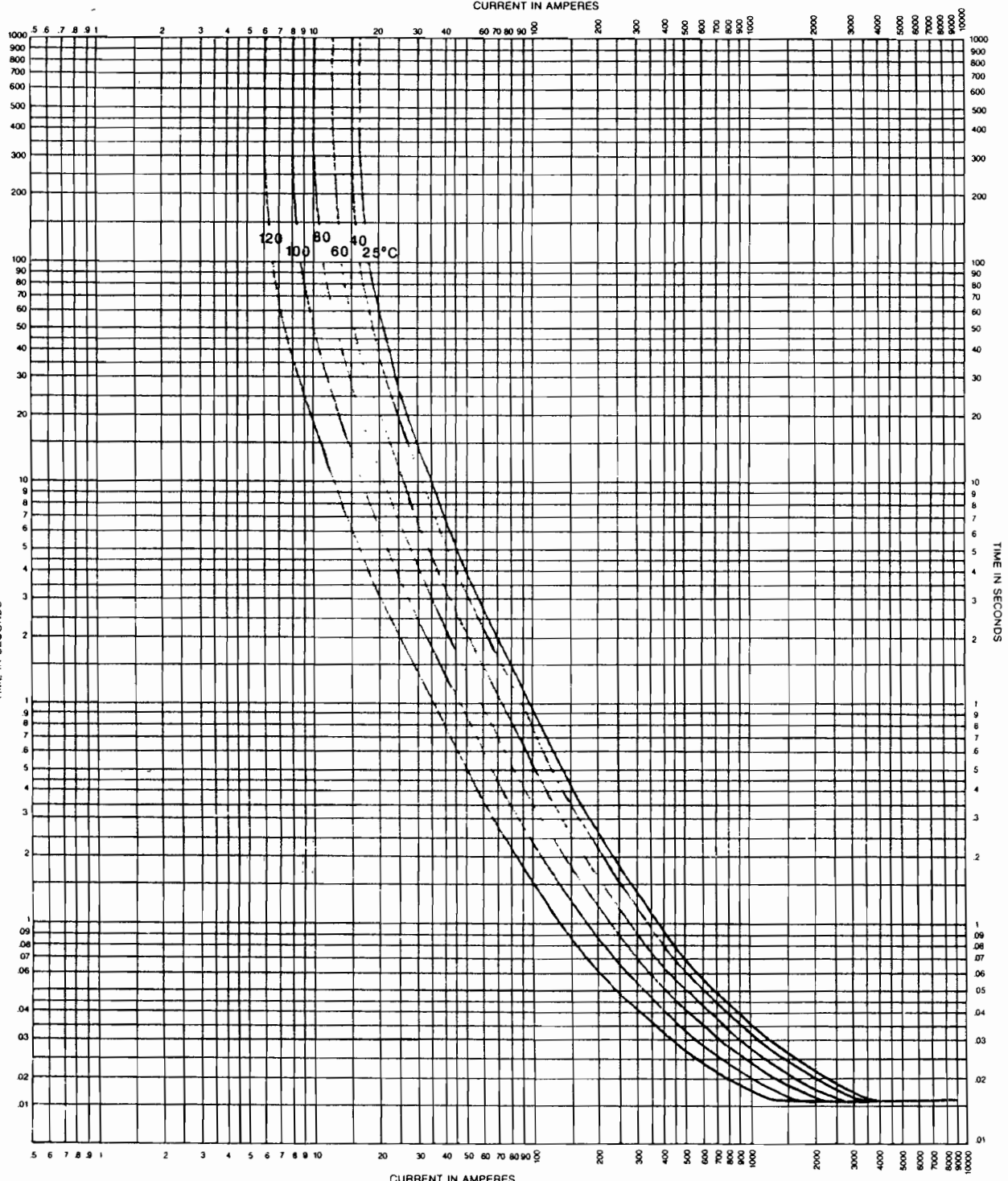
NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C
PER RTE DRAWING NO. 38442 DATED 9-18-87



RTE COMPONENTS 1345 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER				
				ELEMENT NO. 03 @ VARIOUS TEMPERATURES				
DWN VJS		CH'KD <i>Fm</i>	ISSUED	Tests made at		Volts ac at LOW	pf	@ 25° C with no initial load
4-8-88		4-12-88		Standards used as basis for data		ANSI	C37.47 (1981)	Date 4-7-88 No. 03 TEMP
SCALE	42	38558	B	00				

NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C
 PER RTE DRAWING NO. 38442 DATED 9-18-87

CURRENT IN AMPERES

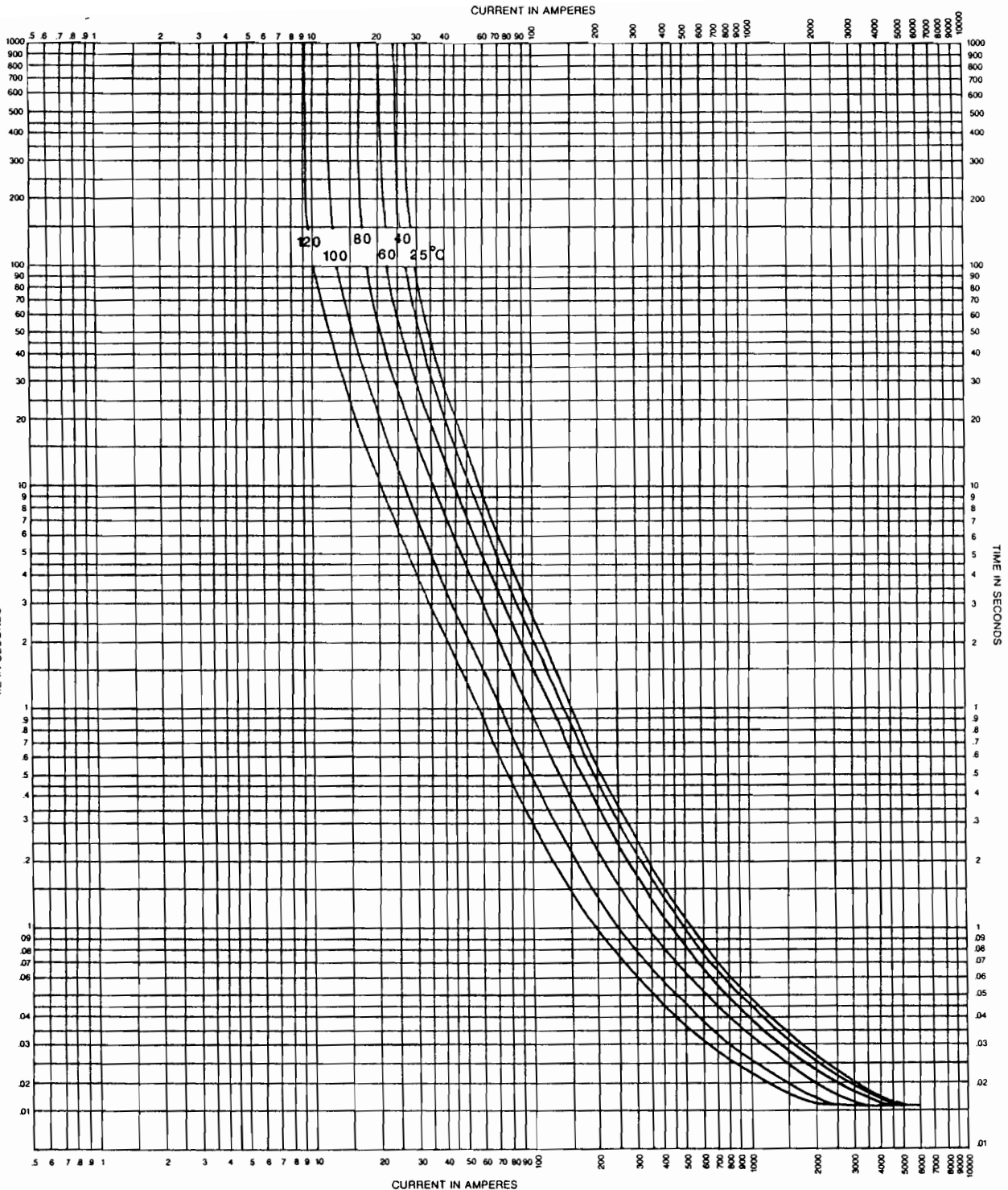


CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
				ELEMENT NO. 04 @ VARIOUS TEMPERATURES			
DWN VJS		CH'KD <i>Jm</i>	ISSUED	Tests made at Volts ac at LOW pf @ 25° C with no initial load			
4-8-88		4-12-88		Standards used as basis for data ANSI C37.47 (1981)			
SCALE		42	38559	B	00		
				Date 4-7-88 No. 04 TEMP			

NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C

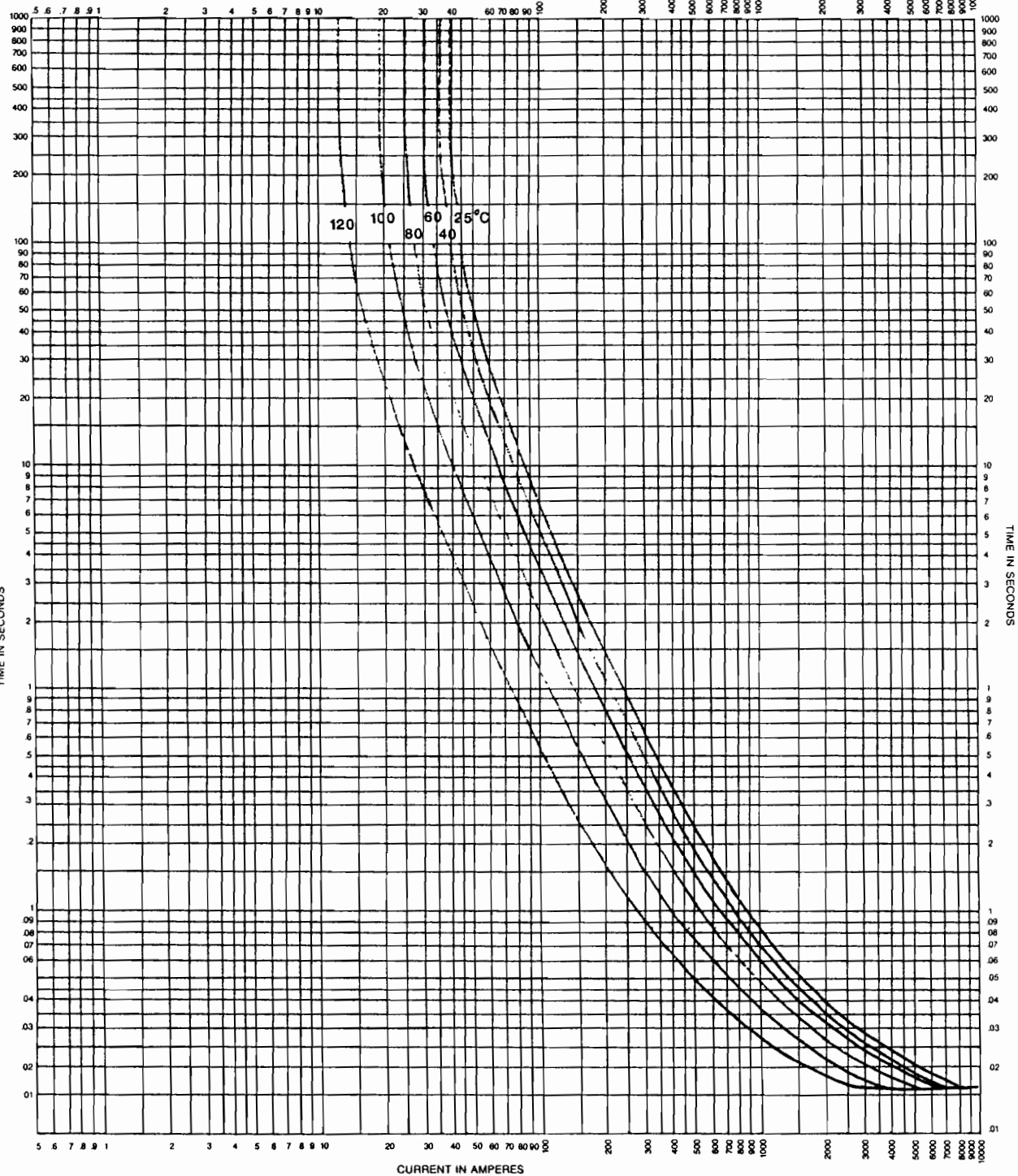
PER RTE DRAWING NO. 38442 DATED 9-18-87



RTE COMPONENTS				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
1045 Hickory Street Pewaukee, Wisconsin 53072				ELEMENT NO. 05 @ VARIOUS TEMPERATURES			
DWN VJS		CH'KD <i>Jm</i>	ISSUED	Tests made at		Volts ac at LOW	pl @ 25° C with no initial load
4-8-88		4-14-88		Standards used as basis for data		ANSI	C37.47 (1981)
SCALE		42	38560	B	00	Date 4-7-88	No. 05 TEMP

NOTE: THE CURVES ARE SHIFTED 0.7% / C ABOVE 25 C FROM A BASE CURVE OF 25 C.
 PER RTE DRAWING NO. 38442 DATED 9-18-87

CURRENT IN AMPERES

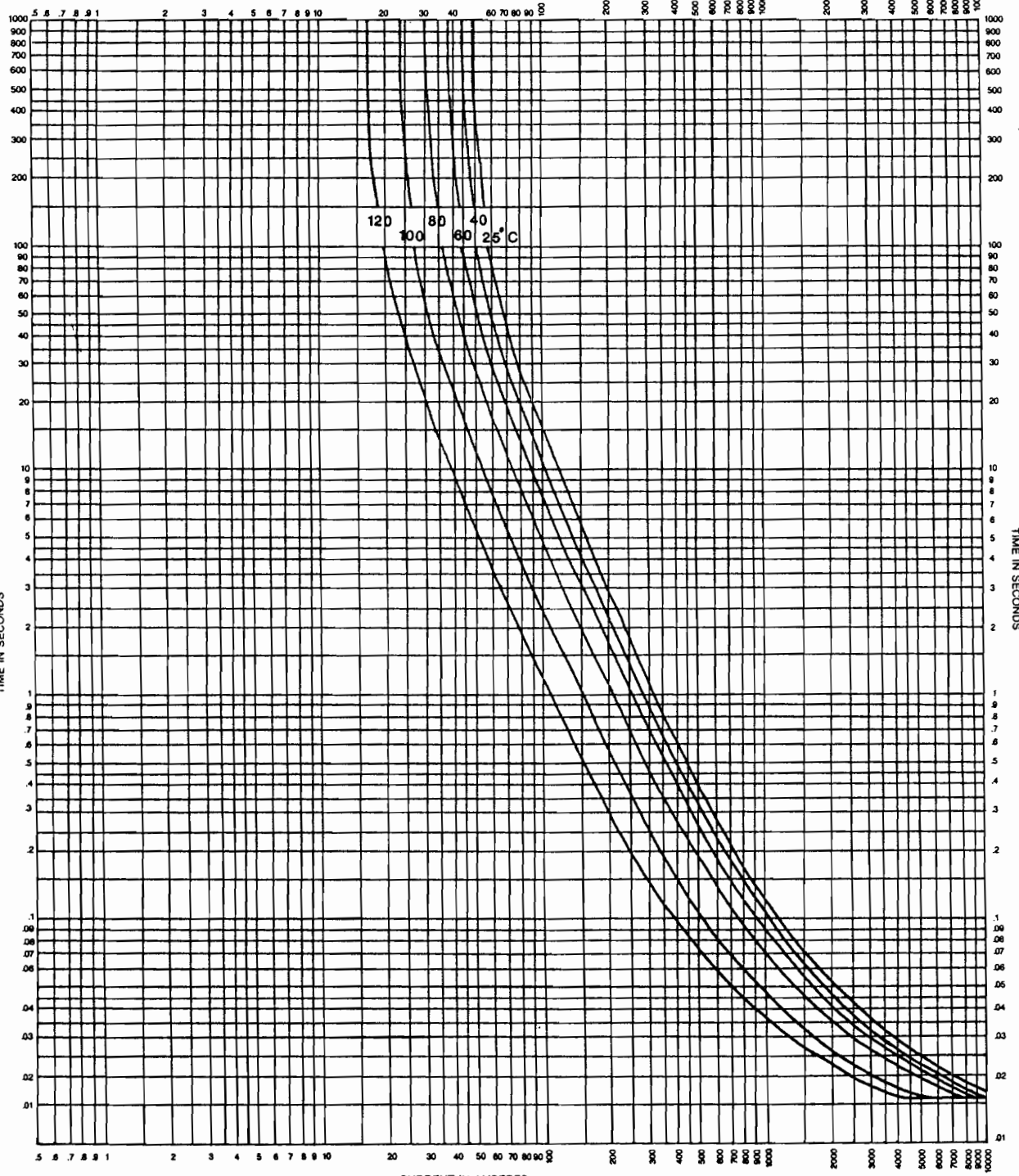


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RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
				ELEMENT NO. 06 @ VARIOUS TEMPERATURES			
DWN VJS		CH'KD <i>AVM</i>	ISSUED		Tests made at Volts ac at LOW pf @ 25° C with no initial load		
4-8-88		4-12-88		Standards used as basis for data ANSI C37.47 (1981)			
SCALE		42	38561	B	00	Date 4-7-88 No. 06 TEMP	

NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C
 PER RTE DRAWING NO. 38442 DATED 9-18-87

CURRENT IN AMPERES

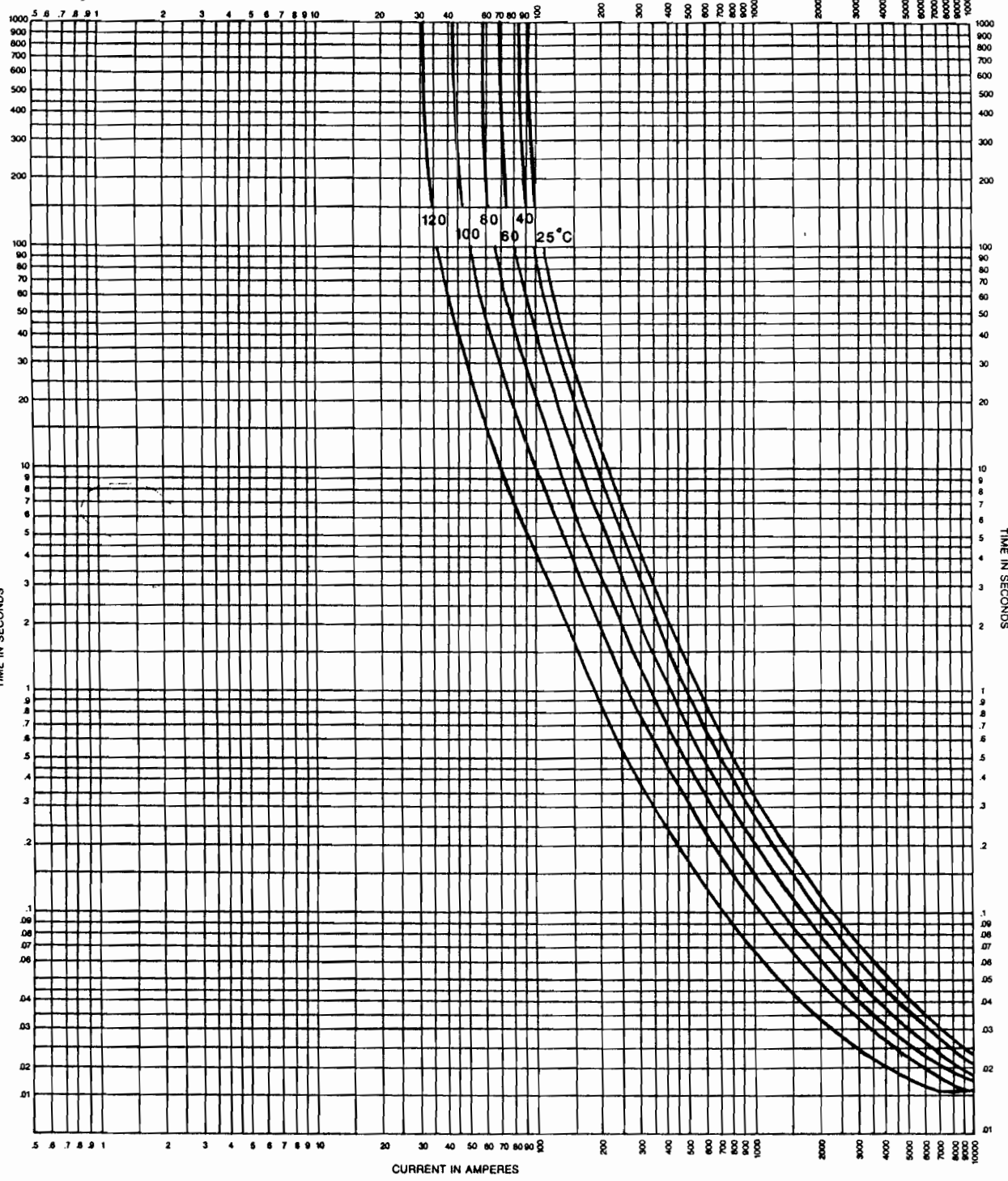


CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
				ELEMENT NO. 07 @ VARIOUS TEMPERATURES			
DWN		VJS		CH'KD <i>Am</i>		ISSUED	
4-8-88		4-13-88					
Tests made at				Volts ac at LOW		pf @ 25° C with no initial load	
Standards used as basis for data				ANSI		C37.47 (1981)	
SCALE				42		38562 B 00	
						Date 4-7-88 No. 07 TEMP	

NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C
 PER RTE DRAWING NO. 38442 DATED 9-18-87

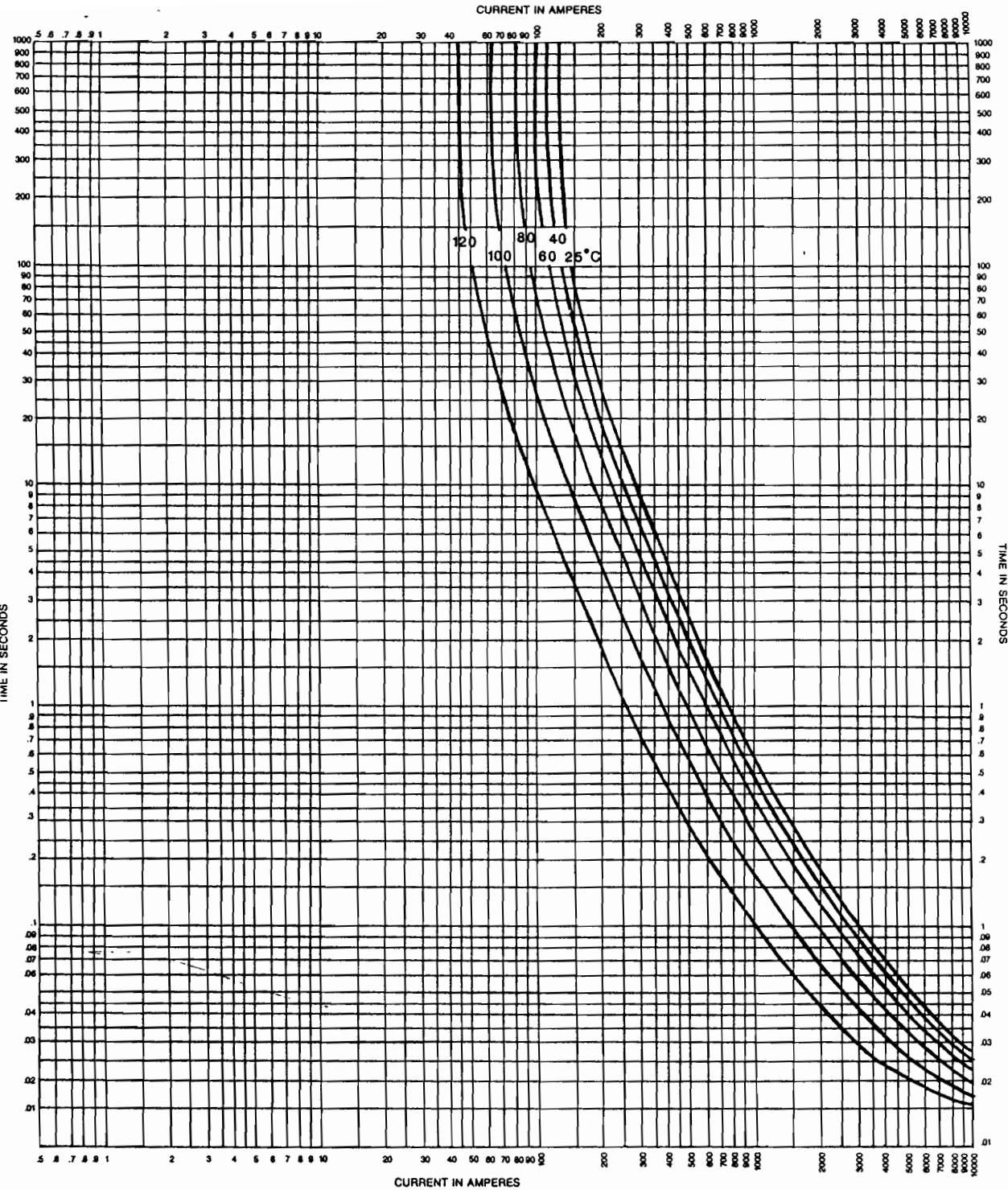
CURRENT IN AMPERES



CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072					MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER				
					ELEMENT NO. 08 @ VARIOUS TEMPERATURES				
DWN VJS		CH'KD	ISSUED	Tests made at		Volts ac at LOW	pl	@ 25° C with no initial load	
4-8-88		4-12-88		Standards used as basis for data		ANSI	C37.47 (1981)	Date 4-7-88 No. 08 TEMP	
SCALE	42	38583	B	00					

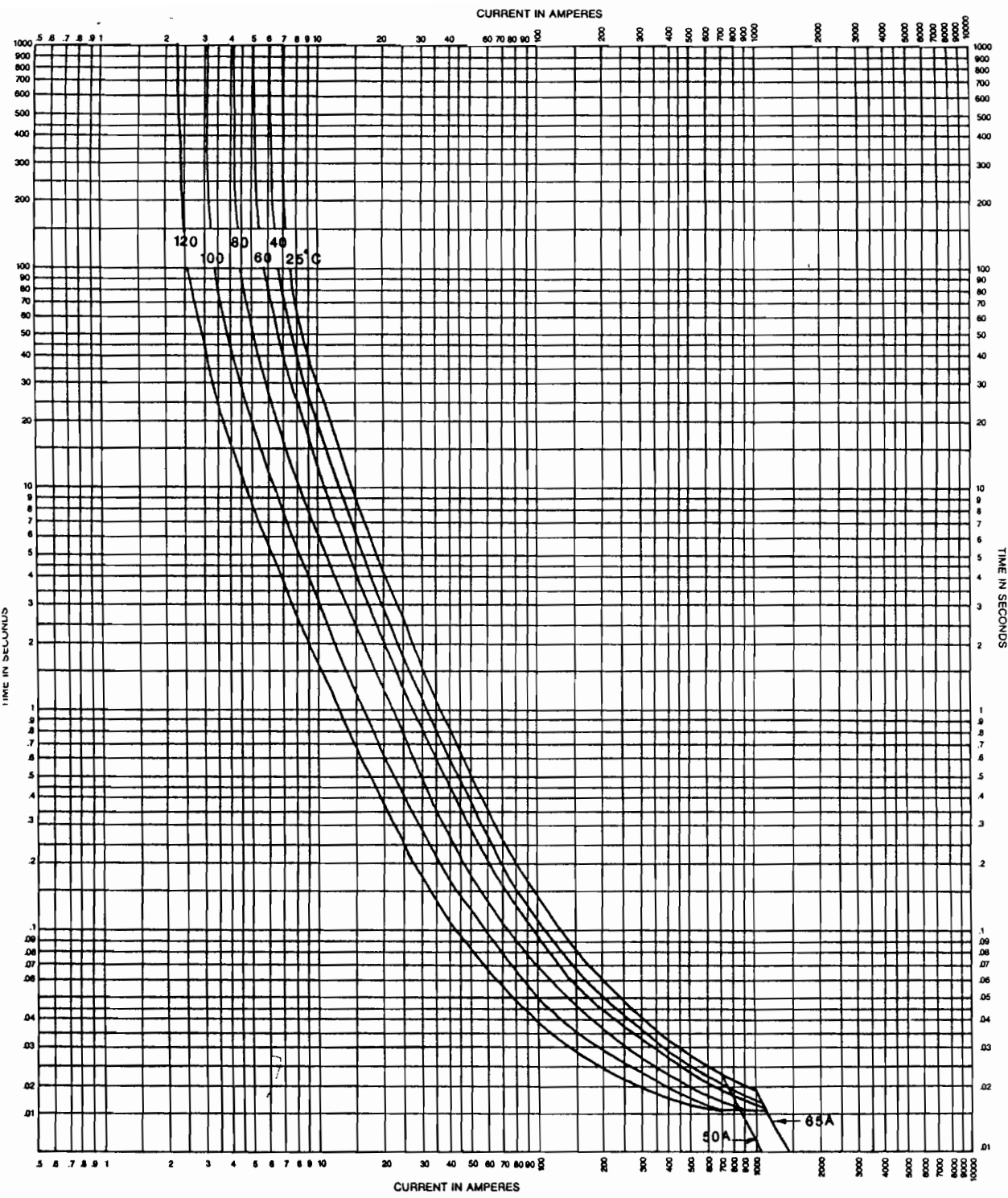
NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C
 PER RTE DRAWING NO. 38442 DATED 9-18-87



CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTERS			
				ELEMENT NO. 09 @ VARIOUS TEMPERATURES			
Tests made at		Volts ac at LOW		pf		@ 25° C with no initial load	
Standards used as basis for data		ANSI		C37.47 (1981)			
DWN	VJS	CH'KD	Jm	ISSUED	Date 4-7-88 No. 09 TEMP		
4-8-88	4-12-88						
SCALE	42	38564	B	00			

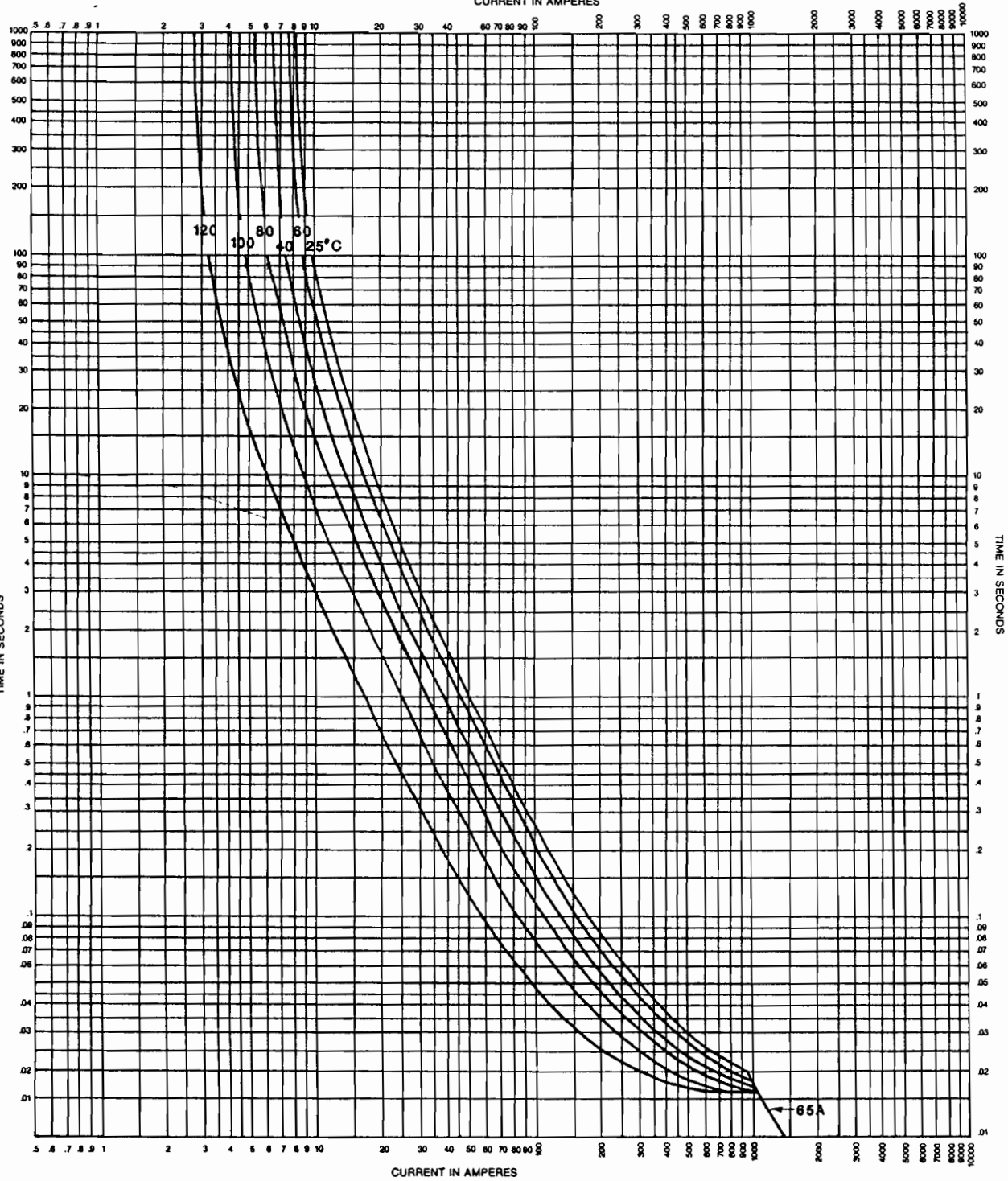
NOTE: THE CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C
 PER RTE DRAWING NO. 38442 DATED 9-18-88.



RTE COMPONENTS				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
1045 Hickory Street Pewaukee, Wisconsin 53072				ELEMENT NO. 01 @ VARIOUS TEMPERATURES			
DWN VJS		CH'KD <i>DM</i>	ISSUED	Tests made at	Volts ac at LOW	pf	@ 25° C with no initial load
4-11-88		4-13-88		Standards used as basis for data	ANSI	C37.47 (1981)	
SCALE		42	38574	B	00	Date 4-7-88 No. 01 ELSP	
WITH 50A AND 65A ELSP MAXIMUM CLEAR TCC @ 25°C							

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

CURRENT IN AMPERES

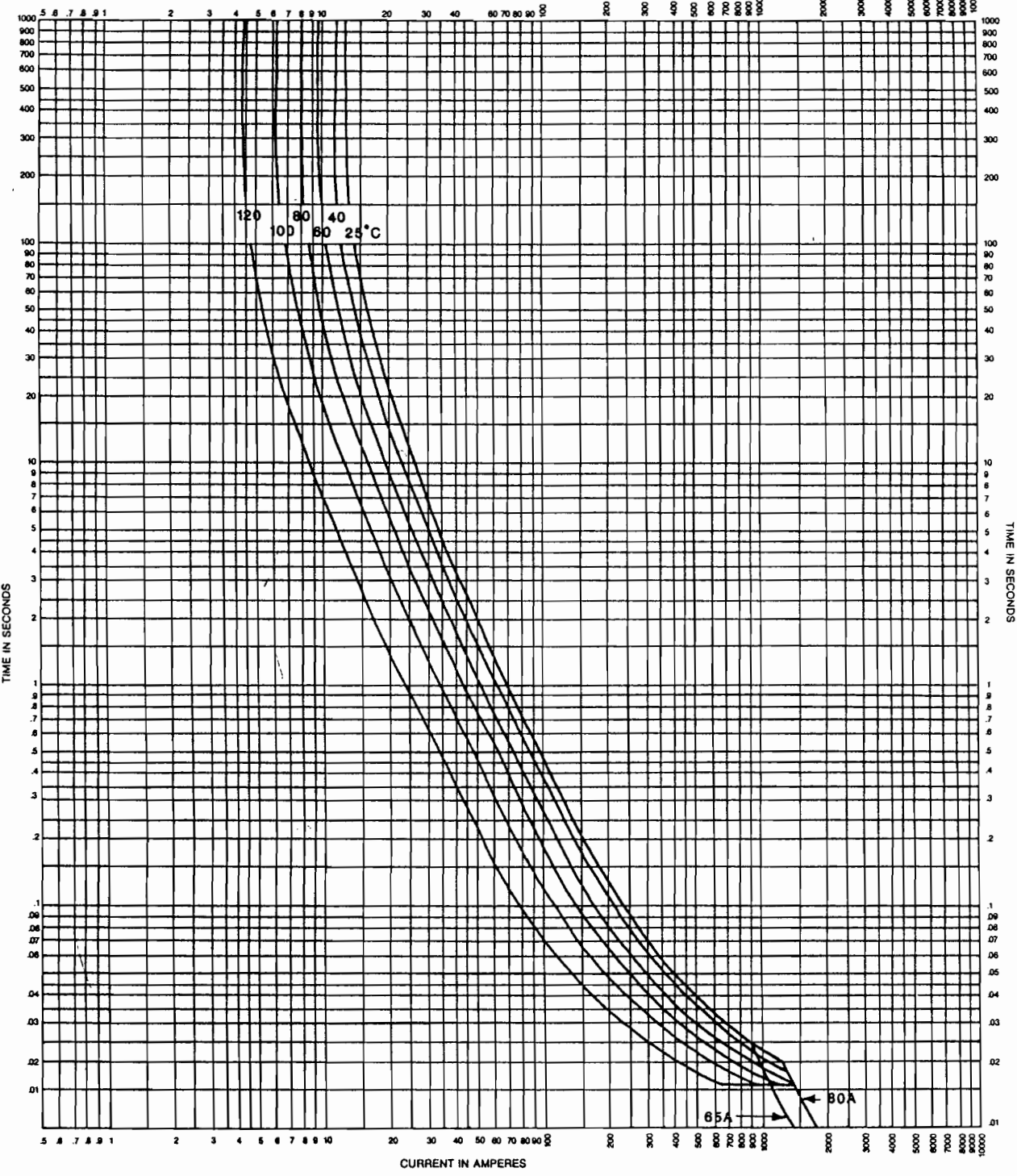


CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER ELEMENT NO. 02 @ VARIOUS TEMPERATURES			
				Tests made at		Volts ac at LOW	
DWN	VJS	CH'KD <i>Am</i>	ISSUED	Standards used as basis for data		ANSI C37.47 (1981)	
4-11-88	4-13-88			Date 4-7-88 No. 02 ELSP			
SCALE	42	38575	B	00	WITH 65A MAXIMUM CLEAR TCC @ 25°C		

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

CURRENT IN AMPERES

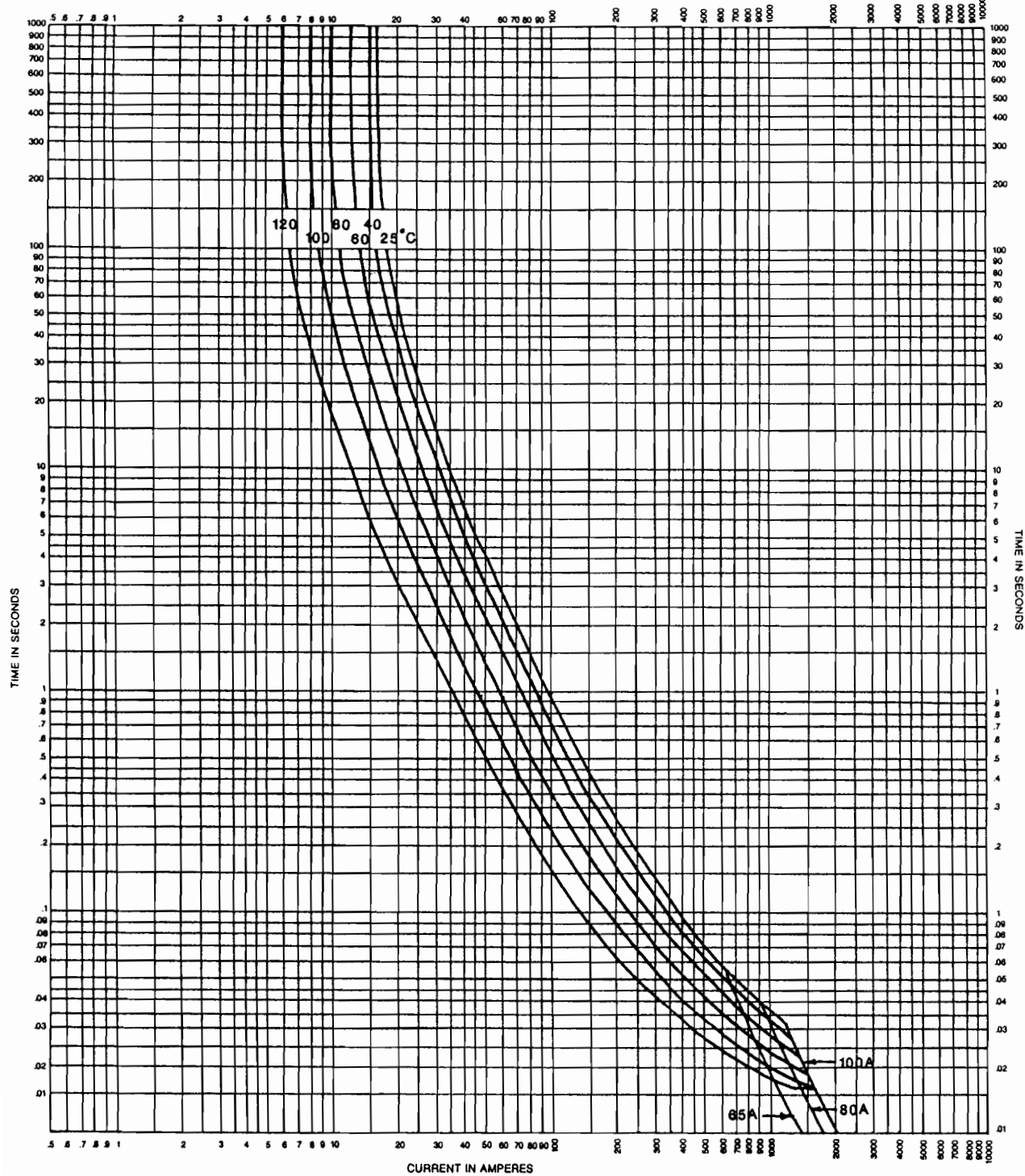


CURRENT IN AMPERES

RTE COMPONENTS				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
1045 Hickory Street Pewaukee, Wisconsin 53072				ELEMENT NO. 03 @ VARIOUS TEMPERATURES			
Tests made at		Volts ac at LOW		pf		@ 25° C with no initial load	
Standards used as basis for data				ANSI C37.47 (1981)			
DWN	VJS	CHK'D	ISSUED	Date 4-7-88 No. 03 ELSP			
4-11-88		4-13-88					
SCALE	42	38576	B 00	WITH 65A AND 80A ELSP MAXIMUM CLEAR TCC @ 25° C			

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25° C FROM A BASE CURVE OF 25 C PER RTE DRAWING NO. 38442 DATED 9-18-87

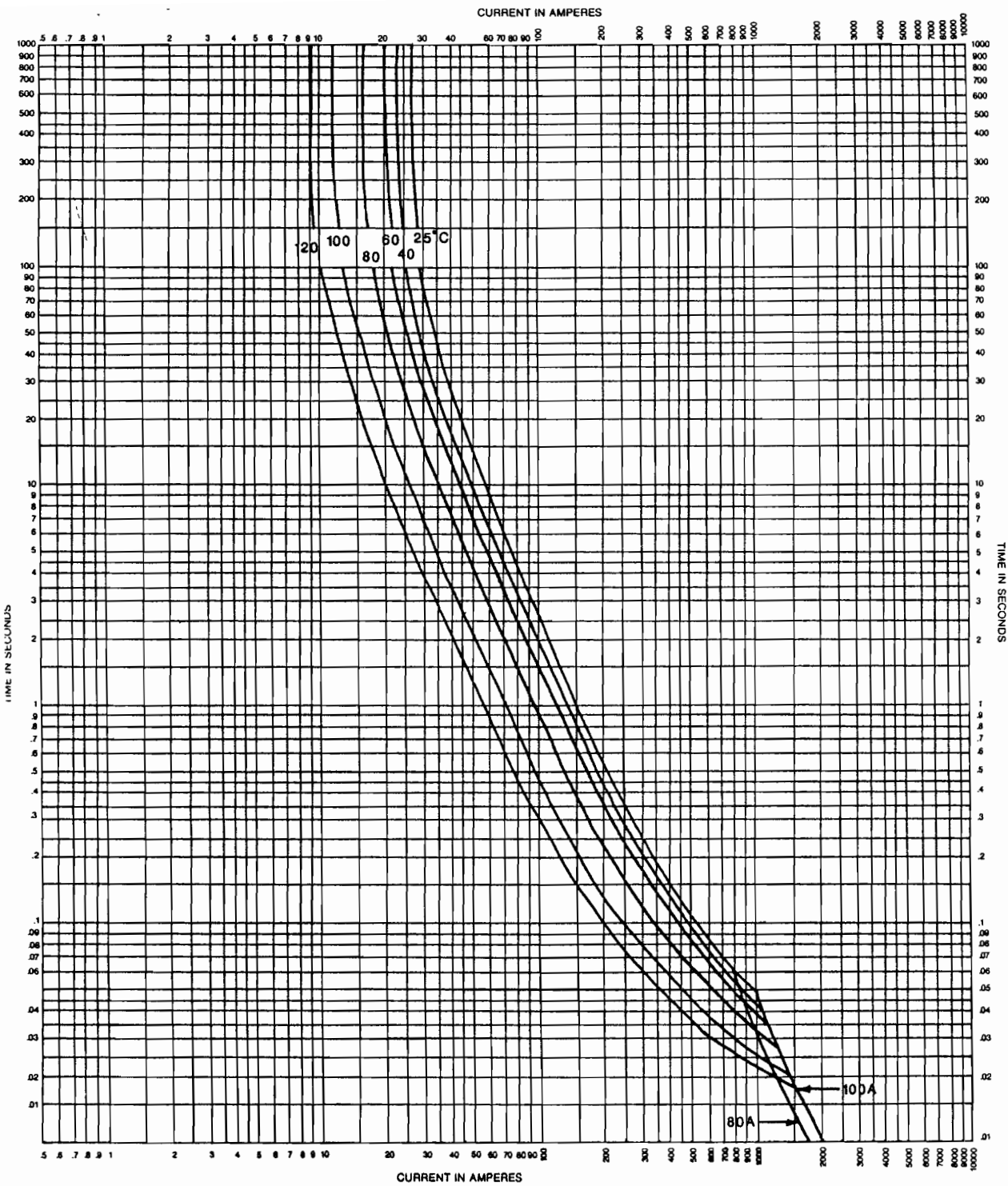
CURRENT IN AMPERES



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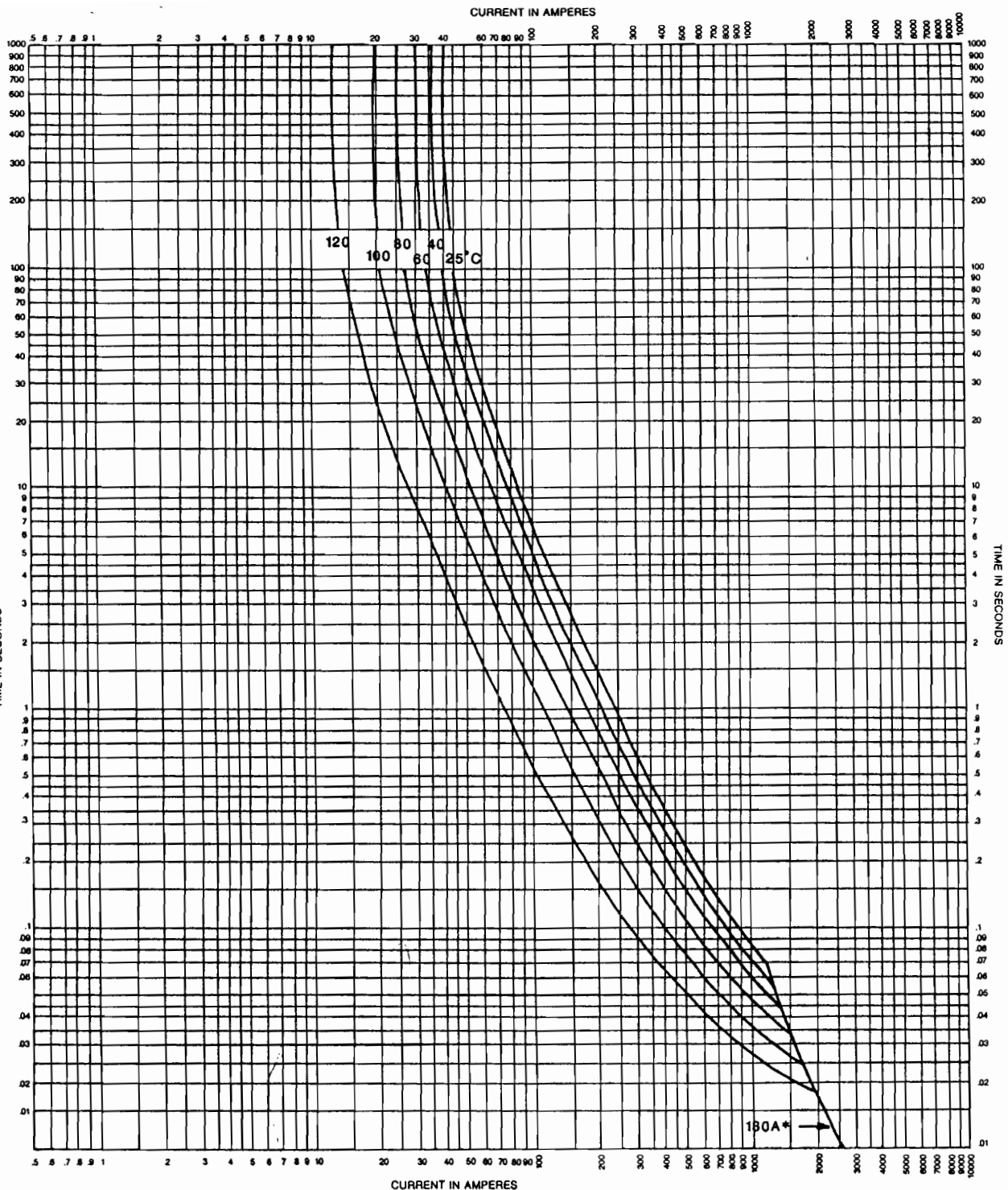
RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER				
				ELEMENT NO. 04 @ VARIOUS TEMPERATURES				
DWN VJS		CH'KD <i>Am</i>	ISSUED	Tests made at		Volts ac at LOW	pf	@ 25° C with no initial load
4-11-88		4-12-88		Standards used as basis for data		ANSI	C37.47 (1981)	Date 4-7-88 No. 04 ELSP
SCALE	42	38577	B	00	WITH 65A, 80A AND 100A ELSP MAXIMUM CLEAR TCC @ 25°C			

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7°C ABOVE 25°C FROM
 A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87



RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
				ELEMENT NO. 05 @ VARIOUS TEMPERATURES			
DWN VJS		CH'KD <i>JM</i>	ISSUED	Tests made at	Volts ac at LOW	pf	@ 25° C with no initial load
4-11-88		4-12-88		Standards used as basis for data	ANSI	C37.47 (1981)	
SCALE		42	38578	B	00	WITH 80A AND 100A ELSP MAXIMUM CLEAR TCC @ 25°C	
				Date 4-7-88 No. 05 ELSP			

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM
 A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

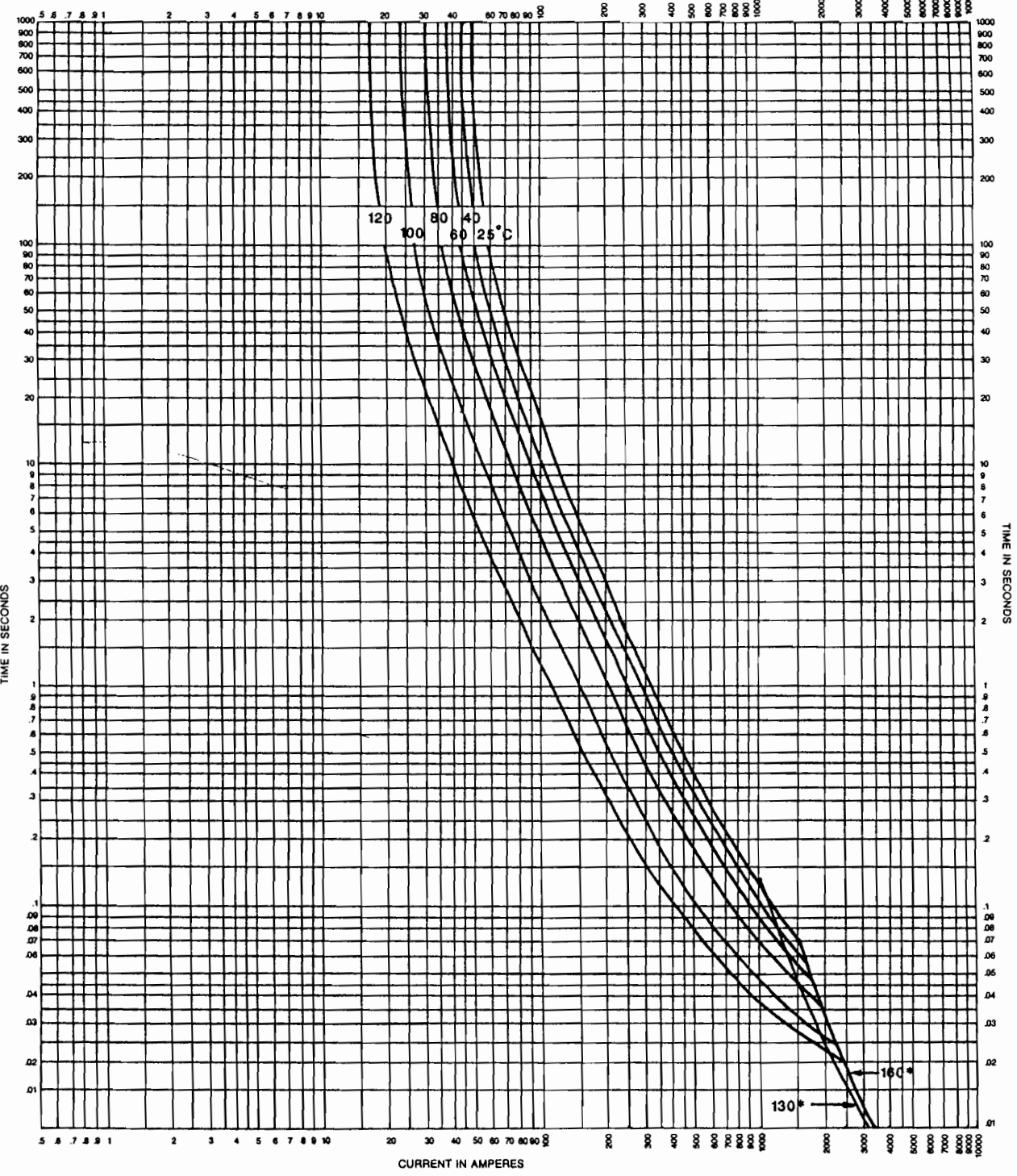


RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER				
				ELEMENT NO. 06 @ VARIOUS TEMPERATURES				
DWN VJS		CH'KD <i>JM</i>	ISSUED	Tests made at		Volts ac at LOW	pf	@ 25° C with no initial load
4-11-88		4-12-88		Standards used as basis for data		ANSI	C37.47 (1981)	Date 4-7-88 No. 06 ELSP
SCALE	42	38579	B	00	WITH 130A* ELSP MAXIMUM CLEAR TCC @ 25°C			

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM
 A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

* PARALLEL RATINGS

CURRENT IN AMPERES



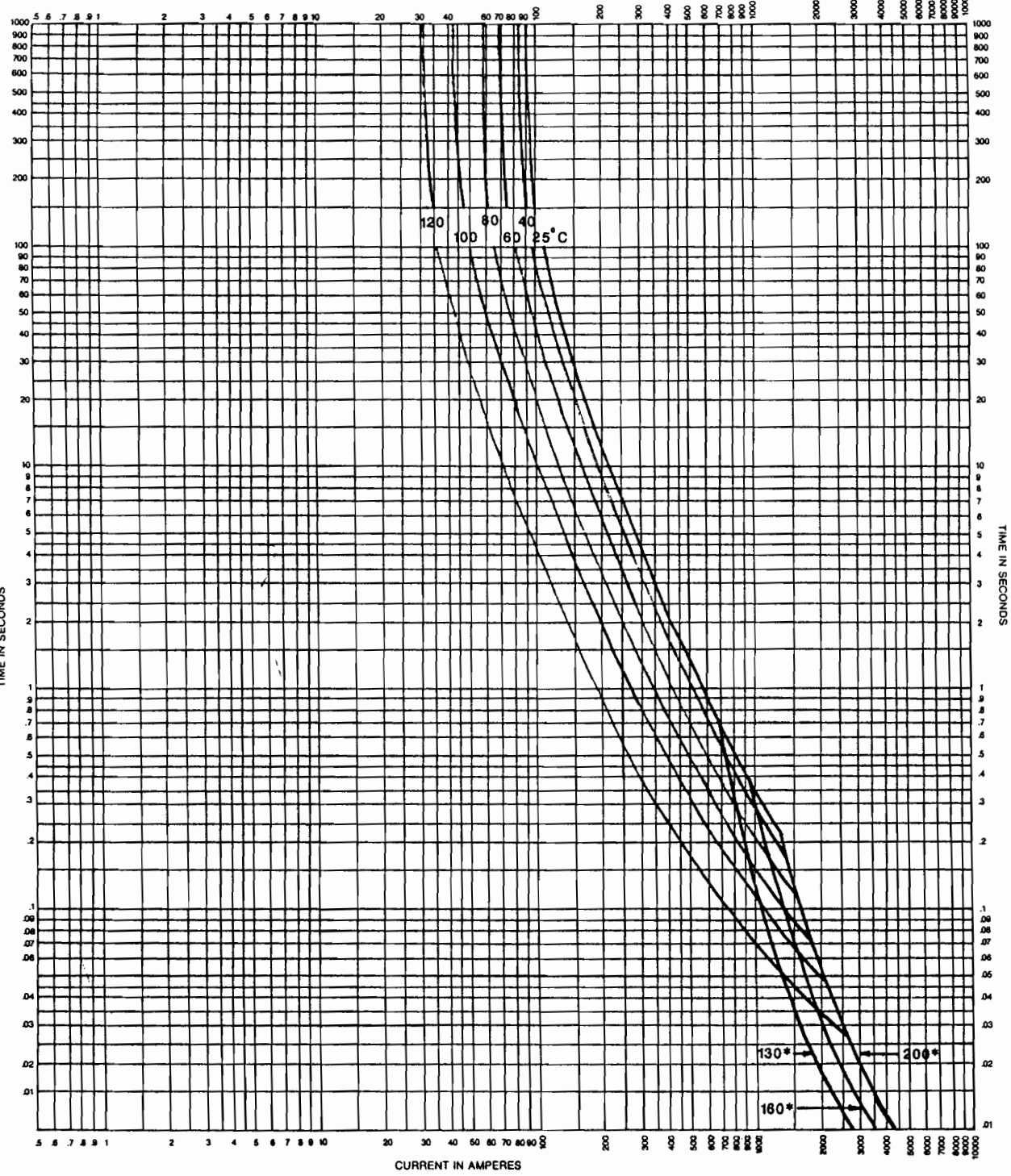
CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER ELEMENT NO. 07 @ VARIOUS TEMPERATURES			
				Tests made at	Volts ac at	LOW	pf
DWN	VJS	CH'KD	ISSUED	Standards used as basis for data	ANSI	C37.47 (1981)	Date 4-7-88 No. 07 ELSP
4-11-88		4-12-88					
SCALE	42	38580	B	00	WITH 130A* AND 160A* ELSP MAXIMUM CLEAR TCC @ 25°C		

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM
 A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

* PARALLEL RATINGS

CURRENT IN AMPERES

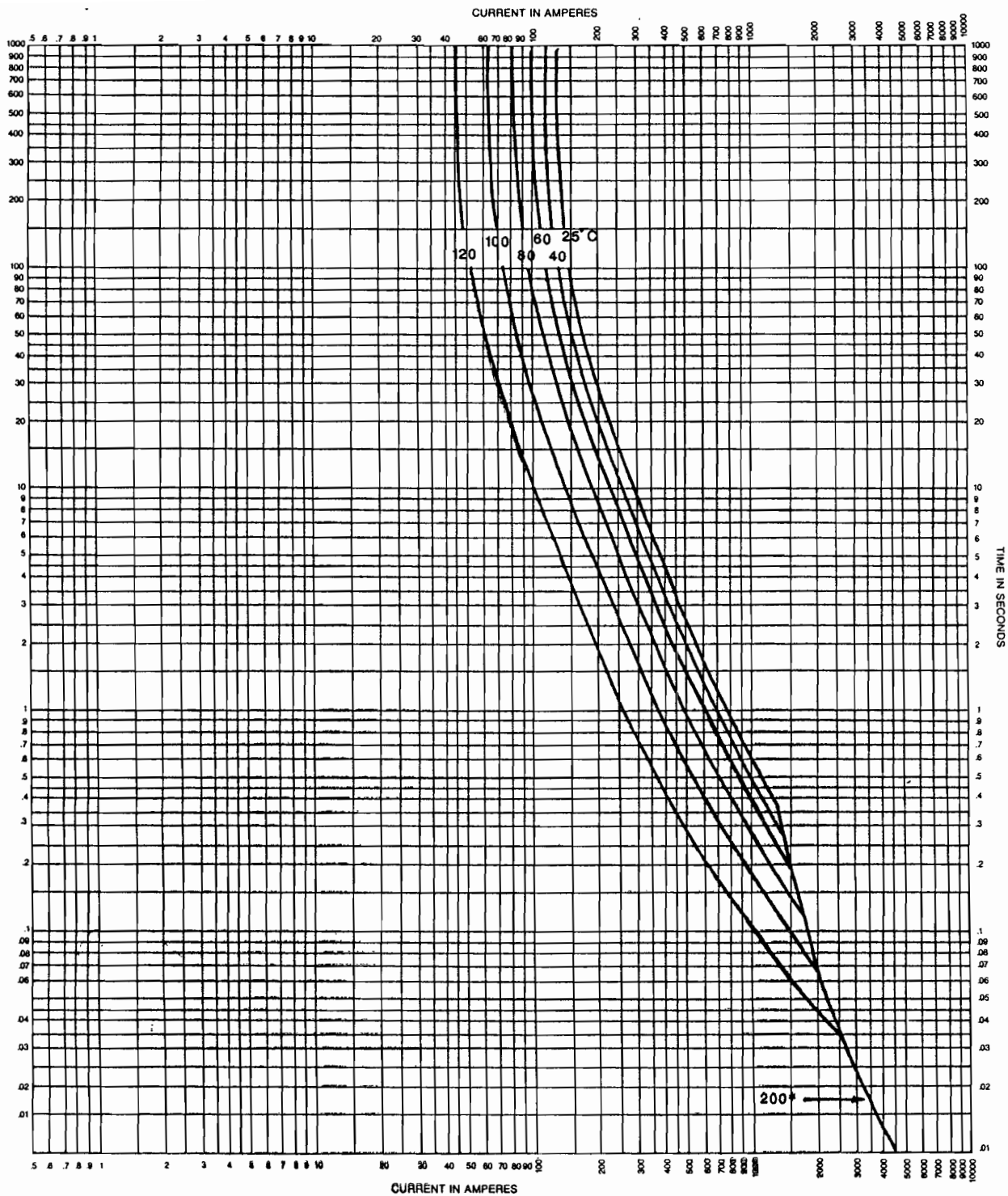


CURRENT IN AMPERES

RTE COMPONENTS 1045 Hickory Street Pewaukee, Wisconsin 53072				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER				
				ELEMENT NO. 08 @ VARIOUS TEMPERATURES				
DWN VJS		CH'KD <i>Jm</i>	ISSUED	Tests made at		Volts ac at LOW	pf	@ 25° C with no initial load
4-11-88		4-12-88		Standards used as basis for data		ANSI	C37.47 (1981)	
SCALE		42	38581	B	00	Date 4-7-88 No. 08 ELSP		
WITH 130*, 160* AND 200* ELSP MAXIMUM CLEAR TCC @ 25°C								

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM
 A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

* PARALLEL RATING



RTE COMPONENTS				MAXIMUM TRIP CURVES FOR MAGNEX INTERRUPTER			
1045 Hickory Street Pewaukee, Wisconsin 53072				ELEMENT NO. 09 @ VARIOUS TEMPERATURES			
DWN VJS		CH'KD <i>Fm</i>	ISSUED	Tests made at	Volts ac at LOW	pf	@ 25° C with no initial load
4-11-88		4-12-88		Standards used as basis for data	ANSI	C37.47 (1981)	Date 4-7-88 No. 09 ELSP
SCALE	42	38582	B 00	WITH 200A* ELSP MAXIMUM CLEAR TCC @ 25°C			

NOTE: THE MAGNEX INTERRUPTER CURVES ARE SHIFTED 0.7%/°C ABOVE 25°C FROM
A BASE CURVE OF 25°C PER RTE DRAWING NO. 38442 DATED 9-18-87

* PARALLEL RATING