

## 12 Response Logic

The Acquiring API provides different responses depending on the type of operation and features used in the request. Generally an operation will result in a response containing:

- **Different transaction references**  
E.g. retrievalRefNumber. The retrievalRefNumber is important to store for future reference, as it is the reference that should be used when in contact with Bambora.
- **Different response codes**  
The Acquiring API provides response codes on different detail levels. ResponseCodeCategory is the most high-level response code. It merely indicates whether the operation was approved, partially approved or declined. On the other end of the spectrum, responseCode1987 is the most detailed response code, giving you the raw response from scheme. Hence, the responseCode1987 have different meaning depending on scheme. For the responseCode1987 to be present, the operation must have resulted in communication with scheme. If the operation results in no communication with scheme, the responseCode1987 can in some cases be missing. The responseCode1987 can also in some cases be mapped to an appropriate response code on our end. This is true for all Diners Club & Discover & AMEX operations.  
  
To reduce the need to understand the full complexity of the responseCode1987, we have mapped the values to additional intuitive response codes that are interpretations of the responseCode1987, called responseCode and responseCode2003. They are textual and numeric representations based on ISO 8583:2003 and are identical between all schemes. This makes them easier to base logic on. And then if needs arise for scheme specific response handling, you can use responseCode1987 in those cases.
- **Responder**  
Indicates the origin of the response.
- **Operation specific response data**  
Depends on the type of operation.
- **Feature specific response data**  
Depends on the types of features used in the operation.

Further on we will clarify the set of response codes provided in the Acquiring API.

### 12.1 Response components

**Note:** All currency amounts are expressed in the minor unit of currency without a decimal separator, in accordance with ISO-4217 standards for currency notation. The API use MasterCard definition of the ISO-4217 standard, which do have a number of differences compared to the official ISO version. For example Iceland Krona (ISK) have 2 currency exponents. <https://developer.mastercard.com/page/iso-4217-currency-codes>

AcqApiTxResponse	
Name	Comments
amount*	
approvalCode	Authorization approval code if received from issuer."
clearingRespData*	Additional response data included when includeClearingRespData is true for transaction clearing, used only per agreement.
ecomRespData*	eCommerce and MOTO response data. Present if relevant data is available.
initialSchemeTransactionId	The Trace-id/TID presented to the scheme for a subsequent Recurring or Merchant Initiated Transaction (MIT), or the Trace-id/TID of an initial Recurring or initial ucof authorization.
merchant*	
operationId	operationId echoed from request
paymentAccountReference	Links all tokens to a PAN, also called PAR by the schemes.
responder	Origin of the response as BAMBORA, PROCESSOR, SCHEME or ISSUER
responseCode	Textual response code ( APPROVED, DENIED_NO_FUNDS or ERROR_ISSUER_INOPERATIVE)
responseCode1987	Response code according to ISO 8583:1987
responseCode2003	Numeric response code according to ISO 8583:2003
responseCodeCategory	Category of response code. <ul style="list-style-type: none"> <li>• APPROVED</li> </ul>

	<ul style="list-style-type: none"> <li>PARTIALLY_APPROVED means that e.g. Address Verification System or similar check was not successful. If client does not wish to proceed with transaction, AUTH_REVERSAL must be sent."</li> <li>DECLINED</li> </ul>
retrievalRefNumber	Retrieval reference number for transaction
terminalRespData*	Payment terminal response data
transactionId	"transactionId echoed from request"
<b>amount*</b>	
Name	Comments
isoAmount	The API use MasterCard definition of the ISO-4217 standard, see note below
amount	
currency	
<b>clearingRespData*</b>	
Name	Comments
addressVerificationSystemResult	Card scheme address verification system result"
authorizationCharacteristicsIndicator"	Authorization characteristics indicator"
cardLevelProductId	Card level product ID"
cvvResultCode	Card scheme CVV result code"
dateSettlement	Card scheme month and day of settlement"
dciPointOfServiceData	DinersClub / Discover point of service data"
electronicCommerceIndicator	Electronic commerce indicator"
lifeCycleIndicator	Life cycle indicator"
merchantCategoryCode	Merchant category code used in authorization"
merchantName	Merchant name used in authorization"
rawActionCode1993	ISO 8583:1993 action code for selected schemes"
terminalTypeIndicator	Terminal type indicator"
transactionId	Card scheme transaction ID"
validationCode	Validation code"
addressVerificationSystemResult	Card scheme address verification system result"
authorizationCharacteristicsIndicator"	Authorization characteristics indicator"
<b>ecomRespData *</b>	
Name	Comments
avsResult	Result of Address Verification Result ( "MATCH", "ADDRESS_MATCH_POSTAL_CODE_MISMATCH", "ADDRESS_MISMATCH_POSTAL_CODE_MATCH", "ADDRESS_MATCH_POSTAL_CODE_NOT_VERIFIED", ADDRESS_NOT_VERIFIED_POSTAL_CODE_MATCH", "MISMATCH", "ERROR", "NOT_VERIFIED" )
cardholderVerificationMethod	"Actual cardholder verification method, present if scheme downgraded 3D Secure to SSL ("NONE", "CVV2", "THREEDS_ATTEMPT", "THREEDS", "THREEDS_MERCHANT_RISK", "THREEDS_ISSUER_RISK", "THREEDS_DATA_ONLY")
cvvResult	( "MATCH", "MISMATCH", "CARD_HAS_CVV", "NOT_VERIFIED" )
<b>merchant*</b>	
Name	Comments
address	Merchant street address, retrieved from merchant configuration if omitted. Mandatory for payment facilitator transactions."
city	Merchant city, retrieved from merchant configuration if omitted. Mandatory for payment facilitator transactions."
country	Merchant country, retrieved from merchant configuration if omitted
independentSalesOrgId	independentSalesOrgId" "Independent sales organisation ID assigned by Bambora
merchantCategoryCode	Merchant category code (MCC), retrieved from merchant configuration if omitted
merchantId	Bambora merchant ID
name	Merchant name, retrieved from merchant configuration if omitted. Mandatory for payment facilitator transactions in which case special format has to be applied.
paymentFacilitatorId	Payment facilitator ID assigned by Bambora
postalCode	Merchant postal code, retrieved from merchant configuration if omitted. Mandatory for payment facilitator transactions.
schemeMerchantId	ID for the merchant used by the scheme
state	Merchant state code, retrieved from merchant configuration if omitted. Can only be supplied if country is USA or CAN

subMerchantId":	ID of sub-merchant assigned by PF/ISO. Used only together with PF ID or ISO ID"
"terminalId"	Terminal ID ANS(8). Optional for eCommerce and other card not present ", "minLength" : 8, "maxLength" : 8
<b>terminalRespData*</b>	
"emvData"	"BER TLV encoded EMV response data"

## 12.2 ResponseCode1987 (MasterCard)

<b>responseCode1987</b>	
Name	
00 = Approved or completed	
01 = Refer to card issuer Call Issuer	
03 = Invalid merchant	
04 = Capture card	
05 = Do not honor	
08 = Honor with ID	
10 = Partial Approval	
12 = Invalid transaction	
13 = Invalid amount	
14 = Invalid card number	
15 = Invalid issuer	
30 = Format error	
41 = Lost card	
43 = Stolen card	
51 = Insufficient funds/over credit limit	
54 = Expired card	
55 = Invalid PIN	
57 = Transaction not permitted to issuer/cardholder	
58 = Transaction not permitted to acquirer/terminal	
60 = Contact Acquirer	
61 = Exceeds withdrawal amount limit	
62 = Restricted card	
63 = Security violation	
65 = Strong customer authentication required by issuer	
70 = Contact Card Issuer	
71 = PIN Not Changed	
75 = Allowable number of PIN tries exceeded	
76 = Invalid/nonexistent "To Account" specified	
77 = Invalid/nonexistent "From Account" specified	
78 = Invalid/nonexistent account specified (general)	
81 = Domestic Debit Transaction Not Allowed (Regional use only)	
84 = Invalid Authorization Life Cycle	
85 = Not declined Valid for all zero amount transactions.	
86 = PIN Validation not possible Decline	
87 = Purchase Amount Only, No Cash Back Allowed	
88 = Cryptographic failure	
89 = Unacceptable PIN—Transaction Declined—Retry	
91 = Authorization System or issuer system inoperative	
92 = Unable to route transaction	
94 = Duplicate transmission detected	
96 = System error Decline	

## 12.3 ResponseCode1987 (Visa)

<b>responseCode1987</b>	
Name	
00 = Approved or completed	
01 = Refer to card issuer Call Issuer (not valid for an issuer to use anymore)	
02 = Refer to card issuer Call Issuer (not valid for an issuer to use anymore)	
03 = Invalid merchant	
04 = Capture card	
05 = Do not honor	
06 = Error	

07 = Capture Card
10 = Partial Approval
11 = V.I.P. approval
12 = Invalid transaction
13 = Invalid amount
14 = Invalid account number
15 = No such issuer
19 = Re-enter transaction
21 = No action taken, unable to back out prior transaction
25 = Unable to locate record in file, or Account number missing from inquiry
28 = File is temporarily unavailable
39 = No credit account
41 = Pick-up card, lost card
43 = Pick-up card, stolen card
51 = Insufficient funds
52 = No current account
53 = No savings account
54 = Expired card
55 = Incorrect PIN
57 = Transaction not permitted to Cardholder
58 = Transaction not allowed at terminal
59 = Suspected fraud
60 = Contact Acquirer
61 = Activity amount limit exceeded
62 = Restricted card, for example, listed in Country Exclusion table
63 = Security violation
64 = Transaction does not fulfil AML requirement
65 = Activity count limit exceeded
75 = Allowable number of PIN entry tries exceeded
76 = Unable to locate previous message, no match on Retrieval Reference number
77 = Previous message located for a repeat or reversal, but repeat or reversal data is inconsistent with original message
78 = 'Blocked, first used', the transaction is from a new Cardholder, and the card has not been properly unblocked
79 = Transaction already reversed
80 = Visa transaction, credit Issuer unavailable, or Private label transaction, invalid date
81 = PIN cryptographic error found, error found by VIC security module during PIN decryption
82 = Negative online CAM, dCVV, iCVV, or CVV results, or Offline PIN authentication was interrupted
85 = No reason to decline
86 = Cannot verify PIN
91 = Issuer unavailable
92 = Routing not found
93 = Transaction cannot be completed; violation of law.
94 = Duplicate transaction
96 = System malfunction
1A = Strong customer authentication required by issuer
B1 = Surcharge amount not permitted on Visa cards (US Acquirers only)
N0 = Force STIP
N3 = Cash service not available
N4 = Cash back request exceeds Issuer limit
N7 = Decline for CVV2 failure
N8 = Transaction amount exceeds pre-authorized approval amount
P2 = Invalid biller information
P5 = PIN change/unblock request declined
P6 = Unsafe PIN
R0 = Stop payment order
R1 = Revocation of authorization order. Issuers receive an advice each time a transaction is stopped in VEAS by the Visa Europe Payment Stop Service
R3 = Revocation of all authorizations order. Issuers receive an advice each time a transaction is stopped in VEAS by the Visa Europe Payment Stop Service.
Q1 = Card authentication failed, or Offline PIN authentication interrupted

## 12.4 ResponseCode1987 (UnionPay)

responseCode1987
Name
00 = Approved or completed
01 = Refer to card issuer Call Issuer
03 = Invalid merchant
04 = Capture card

05 = ID certification fails  
 10 = Partial Approval  
 11 = VIP (Approved)  
 12 = Invalid related transaction  
 13 = Invalid amount  
 14 = Invalid card number  
 15 = No such Issuers  
 16 = Approved to update track3 (approved)  
 21 = Card not initialized  
 22 = Suspected malfunction; related transaction error  
 25 = Unable to locate original transaction  
 30 = Format Error  
 34 = Fraud  
 38 = PIN try limit exceeded  
 40 = Function requested not supported  
 41 = Lost Card  
 43 = Stolen Card  
 45 = Fallback transaction is not allowed  
 51 = Insufficient balance  
 54 = Expired Card  
 55 = Incorrect personal identification number  
 57 = Transaction not allowed to be processed by cardholder  
 58 = Transaction not allowed to be processed by terminal  
 59 = Suspected fraud  
 61 = Transaction amount limit exceeded  
 62 = Restricted card  
 64 = Original transaction amount error  
 65 = Exceeds withdrawal velocity limit  
 68 = Issuer response Timeout  
 75 = Allowable number of PIN tries exceeded  
 90 = Cutoff in progress  
 91 = Issuer not capable to process  
 92 = Financial institution or intermediate network facility cannot be found for routing  
 94 = Duplicated transaction  
 96 = Switch system malfunction  
 97 = ATM/POS terminal number cannot be located  
 98 = Issuer response not received by CUPS  
 99 = PIN Block Error  
 A0 = MAC failed  
 A2 = Successful transaction with fault (Approved)  
 A3 = Account not found in Transfer-inside  
 A4 = Successful transaction with fault (Approved)  
 A5 = Successful transaction with fault (Approved)  
 A6 = Successful transaction with fault (Approved)  
 A7 = Security processing failure  
 B1 = No arrears (transaction receipt not printed)  
 C1 = Illegal Status of Acquirer  
 D1 = Incorrect IIN  
 D2 = Date Error  
 D3 = Invalid file type  
 D4 = File processed  
 D5 = No such file  
 D6 = Not supported by Receiver  
 D7 = File locked  
 D8 = Unsuccessful  
 D9 = Incorrect file length  
 DA = File decompression error  
 DB = Filename error  
 DC = File cannot be received  
 F1 = File record format error  
 F2 = File record repeated  
 F3 = File record not existing  
 F4 = File record error  
 N1 = Items not on Bankbook beyond limit, declined  
 Y1 = The offline transaction is successful (only used for IC cards based on UICS debit/credit standard.  
 Y3 = It is unable to be online. The offline transaction is successful (only used for IC cards based on UICS debit/credit standard.  
 Z1 = The offline transaction fails (only used for IC cards based on UICS debit/credit standard.  
 Z3 = It is unable to be online. The offline transaction fails (only used for IC cards based on UICS debit/credit standard.

## 12.5 ResponseCode1987 (Diners Club & Discover & AMEX)

For Diners Club, Discover & AMEX operations the responseCode1987 is mapped to appropriate Visa & MasterCard responseCode1987 on our end. Hence the API response for these schemes does not contain the intact/raw response from scheme. Therefore you should use the scheme independent responseCode2003 and responseCode to interpret the response reason in case of any uncertainty.

## 12.6 ResponseCode2003 (All schemes)

responseCode2003 = responseCode	
Name	
0 = APPROVED	
1 = APPROVED_CHECK_ID	
2 = APPROVED_PARTIAL_AMOUNT (Not used today)	
3 = APPROVED_VIP (Same interpretation as APPROVED)	
4 = APPROVED_UPDATE_TRACK3 (Not used today)	
800 = APPROVED_INT (Not used today)	
801 = APPROVED_WITH_FAULT (Not used today)	
999 = APPROVED_UNKNOWN (Not used today)	
1000 = DENIED	
1001 = DENIED_EXPIRED_CARD	
1002 = DENIED_SUSPECTED_FRAUD	
1003 = DENIED_CONTACT_ACQ	
1004 = DENIED_RESTRICTED_CARD	
1005 = DENIED_CONTACT_ACQ_SEC	
1006 = DENIED_PIN_LOCKED	
1007 = DENIED_CONTACT_ISSUER	
1008 = DENIED_CONTACT_ISSUER_SC	
1009 = DENIED_INVALID_CARD_ACCEPTOR	
1010 = DENIED_INVALID_AMOUNT	
1011 = DENIED_INVALID_PAN	
1012 = DENIED_PIN_REQUIRED	
1013 = DENIED_UNACCEPTABLE_TX	
1014 = DENIED_INVALID_ACCOUNT	
1015 = DENIED_FUNCTION_NOT_SUPPORTED	
1016 = DENIED_NO_FUNDS	
1017 = DENIED_INCORRECT_PIN	
1018 = DENIED_NO_CARD_RECORD	
1019 = DENIED_NOT_PERMITTED_TO_CARDHOLDER	
1020 = DENIED_NOT_PERMITTED_TO_TERMINAL	
1021 = DENIED_EXCEEDS_WITHDRAWAL_LIMIT	
1022 = DENIED_SECURITY_VIOLATION	
1023 = DENIED_EXCEEDS_WITHDRAWAL_FREQ	
1024 = DENIED_LAW_VIOLATION	
1025 = DENIED_CARD_NOT_EFFECTIVE	
1992 = DENIED_SCA_REQUIRED	
1994 = DENIED_TRY_AGAIN_LATER	
1995 = DENIED_DO_NOT_TRY_AGAIN	
1996 = DENIED_RECURRING_PAYMENT_CANCELLATION	
1997 = DENIED_3DS_MERCHANT_LIABLE	
1998 = DENIED_EMV_FALLBACK	
1999 = DENIED_UNKNOWN	
2000 = DENIED_TC	
2001 = DENIED_TC_EXPIRED_CARD	
2002 = DENIED_TC_SUSPECTED_FRAUD	
2003 = DENIED_TC_CONTACT_ACQ	
2004 = DENIED_TC_RESTRICTED_CARD	
2005 = DENIED_TC_CALL_ACQ_SEC	
2006 = DENIED_TC_PIN_LOCKED	
2007 = DENIED_TC_SC	
2008 = DENIED_TC_LOST_CARD	
2009 = DENIED_TC_STOLEN_CARD	
2010 = DENIED_TC_SUSPECTED_COUNTERFEIT	
2999 = DENIED_TC_UNKNOWN	
3999 = FILE_ACTION_UNKNOWN	
4000 = REVERSAL_APPROVED	

4999 = REVERSAL\_UNKNOWN  
5999 = RECONCILIATION\_UNKNOWN (Not used today)  
6999 = ADMIN\_UNKNOWN (Not used today)  
7999 = FEE\_COLLECTION\_UNKNOWN (Not used today)  
8000 = MGMT\_ACCEPTED (Not used today)  
8999 = MGMT\_UNKNOWN (Not used today)  
9102 = ERROR\_INVALID\_TRANSACTION  
9103 = ERROR\_RE\_ENTER  
9104 = ERROR\_FORMAT  
9105 = ERROR\_ACQ\_NOT\_SUPPORTED  
9106 = ERROR\_CUTOVER  
9107 = ERROR\_ISSUER\_INOPERATIVE  
9108 = ERROR\_CANNOT\_ROUTE  
9109 = ERROR\_SYSTEM  
9110 = ERROR\_ISSUER\_SIGNED\_OFF  
9111 = ERROR\_ISSUER\_TIMEOUT  
9112 = ERROR\_ISSUER\_UNAVAILABLE  
9113 = ERROR\_DUPLICATE  
9114 = ERROR\_CANNOT\_FIND\_ORIGINAL  
9115 = ERROR\_RECONCILIATION  
9116 = ERROR\_MAC\_INCORRECT  
9117 = ERROR\_MAC\_KEY\_SYNC  
9118 = ERROR\_NO\_COMMS\_KEYS  
9119 = ERROR\_ENC\_KEY\_SYNC  
9210 = ERROR\_SECURITY\_SW\_HW\_RETRY  
9121 = ERROR\_SECURITY\_SW\_HW  
9122 = ERROR\_MSG\_SEQ\_NUMBER  
9123 = ERROR\_REQ\_IN\_PROGRESS  
9600 = ERROR\_INT\_UNKNOWN\_DESTINATION  
9601 = ERROR\_INT\_DESTINATION\_INOPERATIVE  
9602 = ERROR\_INT\_UNSUPPORTED\_REQUEST  
9603 = ERROR\_INT\_SYSTEM  
9604 = ERROR\_INT\_ALREADY\_CAPTURED  
9605 = ERROR\_RELATED\_TX\_ERROR  
9606 = ERROR\_AMOUNT\_MISMATCH  
9607 = ERROR\_UNKNOWN\_TERMINAL  
9608 = ERROR\_PIN\_BLOCK  
9609 = ERROR\_ACQ\_STATUS  
9610 = ERROR\_CANNOT\_CAPTURE  
9611 = ERROR\_CURRENCY\_MISMATCH  
9999 = ERROR\_UNKNOWN