... MassMutual Ascend

AssuranceSelect 3 Plus

OVERVIEW

| ISSUE | | | |
|-------------------------------|---|--|--|
| ISSUE AGES | 0-90 (qualified); 0-90 (non-qualified); 0-75 (inherited IRA); 0-75 (inherited non-qualified) | | |
| | Issue age is the owner's age at last birthday. For joint owners, the oldest age will be used as the issue age. If the owner is a non-natural person, the age of the eldest annuitant will be treated as the age of the owner for all purposes under this contract. | | |
| | In Texas, contracts can only be issued up to age 85. | | |
| PURCHASE PAYMENTS | This product accepts purchase payments during the first two contract months. Terms begin only on the $6^{\rm th}$ and $20^{\rm th}$ of each month. Purchase payments are held in the purchase payment account and moved to the strategies at the beginning of the next term. Additional purchase payments may have their own interest strategy terms. | | |
| | Minimum: Initial purchase payment: \$50,000; additional purchase payments: \$2,000 | | |
| | Maximum: \$1 million for ages 0-85; \$500,000 for ages 86+ | | |
| | Maximums apply to the total purchase payments made to all annuities from MassMutual Ascend with the same owners or the same annuitants. | | |
| TAX QUALIFICATIONS | Non-qualified and qualified: 403(b) (traditional and Roth), IRA (traditional, Roth, SEP, SIMPLE and inherited), 457(b) and inherited non-qualified | | |
| EARLY WITHDRAWAL CHARGE | An early withdrawal charge is applied to full surrenders and withdrawals. | | |
| | CONTRACT YEAR 1 2 3 4+ | | |
| | EARLY WITHDRAWAL CHARGE 8% 8% 7% 0% | | |
| | EARLI WITTIDRAWAL SHAROL 0/0 0/0 7/0 0/0 | | |
| MARKET VALUE ADJUSTMENT | During the first three contract years, a market value adjustment (or MVA) will apply if the contract is surrendered or a withdrawal above the free withdrawal allowance is taken. | | |

| GUARANTEED |
|------------------------|
| MINIMUM |
| SURRENDER VALUE |
| (GMSV) |

The GMSV equals 87.5% of purchase payments minus all prior withdrawals (not including early withdrawal charges or negative market value adjustments) plus interest credited daily at the GMSV rate. The GMSV will not be less than the minimum values required by the NAIC standard nonforfeiture law for individual deferred annuities, model #805 and the GMSV rate will not be less than the minimum rate required by each state.

FREE WITHDRAWAL ALLOWANCE

During the first contract year, 10% of purchase payments may be withdrawn without an early withdrawal charge. After the first contract year, 10% of the account value as of the most recent contract anniversary may be withdrawn without an early withdrawal charge.

WITHDRAWALS

Withdrawals are allowed any time prior to the annuity payout initiation date. All withdrawals are subject to IRS regulations and early withdrawal charges. Withdrawals will be taken first from the purchase payment account, then from the declared rate strategy, then proportionally from the other indexed interest strategy(ies) with the shortest term.

Minimum withdrawal: \$500

Minimum account value following withdrawal: \$5,000

TERMINAL ILLNESS WAIVER RIDER

Provided that the diagnosis is rendered more than one year after the contract effective date, up to 100% of the account value can be withdrawn without deduction of an early withdrawal charge if the owner or joint owner is diagnosed by a physician as having a terminal illness with a prognosis of 12 months or less.

This waiver may be used only once. Not available in Massachusetts.

EXTENDED CARE WAIVER RIDER

To help ease the strain of certain unforeseen events, an extended care waiver is available for no additional charge. If the owner is confined to a nursing home or other long-term care facility after the completion of the first contract year for at least 90 consecutive days, early withdrawal charges may be waived on withdrawals up to a full surrender. Not available in Massachusetts.

In California, the Extended Care Waiver Rider has been replaced with the Waiver of Early Withdrawal Charges for Facility Care or Home Care or Community-Based Services Rider, which provides for a waiver of early withdrawal charges under an expanded variety of circumstances.

INTEREST STRATEGIES

Upon issue, the owner selects from two types of interest strategies: a declared rate strategy and an indexed strategy.

At the end of each term of a given interest strategy, the ending value of the interest strategy will be applied to a new term of that same interest strategy. However, the owner may reallocate the ending values of the interest strategies for that term among the available interest strategies by submitting a strategy selection form on or before the last day of the term. Funds held in the First Trust Barclays Edge 1-year with 3-year participation rate lock strategy at the end of the third one-year term are automatically applied to the First Trust Barclays Edge 1-year point to point with participation rate strategy unless the owner elects otherwise. Available strategies are subject to change at any time for new sales.

TERM

- A term refers to the time period during which funds are held in an indexed strategy. Indexed strategies available on this product offer one-year terms. Clients may reallocate funds at the end of each one-year term.
- The First Trust Barclays Edge 1-Year Point-to-Point with 3-Year Participation Rate Lock strategy has three one-year terms. The participation rate is locked in for all three one-year terms. This strategy may only be selected during the first contract year.
- Interest is credited annually on the last day of each term year on all indexed strategies.

INTEREST RATES

Purchase payment account interest rate: Interest is credited daily on amounts held in the purchase payment account at the GMSV rate set out on the contract specifications page.

Declared interest rate: Interest is credited daily on amounts held under a declared rate strategy based on the applicable declared interest rate. The current declared interest rate will not change during the strategy's term and is guaranteed to never be below the guaranteed declared rate for any subsequent terms. The guaranteed declared rate is set out in the interest strategy endorsement. Current declared interest rates and guaranteed declared rates may vary by state; please refer to the current interest rate chart.

Indexed interest rate: Indexed strategies linked to the S&P 500® (SPX), iShares U.S. Real Estate ETF (IYR) and the iShares MSCI EAFE ETF (EFA) provide returns based, in part, on the change in the price of the applicable Index or ETF. The price does not include dividends that might be paid on the underlying investments of the Index or ETF.

Indexed strategies linked to the First Trust Barclays Edge Index (FTEDGE7) provide returns based, in part, on the change in the price of the Index. The price change includes dividends that might be paid on components of the Index.

Indexed strategies include:

- S&P 500[®] 1-year point-to-point with cap
- iShares U.S. Real Estate 1-year point-to-point with cap
- iShares MSCI EAFE 1-year point-to-point with cap
- First Trust Barclays Edge 1-year point-to-point with participation rate
- First Trust Barclays Edge 1-year point-to-point with 3-year participation rate lock

Point-to-point indexed strategy: The indexed interest rate for a term is determined by comparing the index value or share price on the last day of that term to the value or price on the first day of that term. The indexed interest rate for that term equals the index change, up to the cap or multiplied by the participation rate. The indexed interest rate will never be less than 0%.

Available strategies may vary by state and by distribution.

| ACCOUNT VALUE | The account value equals the sum of the following values: |
|---|--|
| | Purchase payment account value: The purchase payment account value is equal to purchase payments received since the last interest strategy application date, minus the premium tax or other tax that may apply to such purchase payments, minus the amount needed to pay for each withdrawal taken from the purchase payment account since the last interest strategy application date, minus charges taken from the purchase payment account since the last interest strategy application date, plus interest earned daily on the purchase payment account value. |
| | Interest strategy value: The interest strategy value is equal to the amount applied to that interest strategy for the current term, minus the amount needed to pay for each withdrawal taken from that interest strategy during the current term, minus charges taken from that interest strategy during the current term, and plus interest, if any, earned on that interest strategy for the current term. |
| SURRENDER VALUE | The surrender value equals the greater of the the account value, reduced by charges not previously deducted, and minus the early withdrawal charge that would apply on a surrender; or the GMSV. |
| PAYOUT OPTIONS | The following options are available: fixed period income, life income or life income with payments for at least a fixed period, or joint and one-half survivor income. |
| OWNERSHIP | Owner and annuitant must be the same on qualified contracts. Joint owners are allowed only on non-qualified contracts. Trusts and corporations are allowed as owners. |
| DEATH BENEFIT | The greater of the account value, reduced by charges not previously deducted, and reduced by premium tax or other taxes not previously deducted; or the GMSV. |
| EASY SYSTEMATIC PAYMENT (ESP) PROGRAM (NON- CONTRACTUAL) | The RMD option is available. Refer to the Terms and Conditions section of the ESP program election agreement form for eligibility requirements. ESP payments reduce the amount available under the free withdrawal allowance. Please note indexed interest is credited only at the end of a term; amounts withdrawn before the end of a term will not earn any indexed interest. |
| STATE VARIATIONS | Texas: Contracts can only be issued up to age 85. |

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